



Center *for* Research Libraries  
.....  
GLOBAL RESOURCES NETWORK

The Center for Research Libraries scans to provide digital delivery of its holdings. In some cases problems with the quality of the original document or microfilm reproduction may result in a lower quality scan, but it will be legible. In some cases pages may be damaged or missing. Files include OCR (machine searchable text) when the quality of the scan and the language or format of the text allows.

If preferred, you may request a loan by contacting Center for Research Libraries through your Interlibrary Loan Office.

#### **Rights and usage**

Materials digitized by the Center for Research Libraries are intended for the personal educational and research use of students, scholars, and other researchers of the CRL member community. Copyrighted images and texts may not be reproduced, displayed, distributed, broadcast, or downloaded for other purposes without the expressed, written permission of the copyright owner.

#### **Center for Research Libraries**

Identifier: 167cb34d-27d0-4155-860c-7771e3551e1c

Range: Scans 001 - 500

Downloaded on: 2024-04-14 03:36:31

# **ELEMENTS OF ECONOMICS**

**AND**

## **THE PAKISTAN ECONOMY**

**BY AKBAR ADIL**  
**M.A., M.Sc. (Econ) (London), LL.B.**



**National Book Foundation**

**KARACHI-ISLAMABAD-LAHORE-PESHAWAR-QUETTA-SUKKUR-MULTAN**



# **ELEMENTS OF ECONOMICS** **AND** **THE PAKISTAN ECONOMY**

**BY AKBAR ADIL**  
**M.A., M.Sc. (Econ) (London), LL.B.**

*Former Senior Economist of the President's Secretariat (Planning Division) and  
former Honorary Lecturer at the Karachi University in "Advanced Economic Theory".*



**National Book Foundation**

KARACHI-ISLAMABAD-LAHORE-PESHAWAR-QUETTA-SUKKUR-MULTAN

**National Book Foundation,  
Press Trust House, I.I. Chundrigar Road, Karachi.**

**Copyright : National Book Foundation**

**First Edition 1976**

**Price Rs. 50/-**

**Published by National Book Foundation.**

**Printed at Pakistan Herald Press,  
Dr. Ziauddin Ahmed Road, Karachi.**

## ***DEDICATION***

***Dedicated to my father, the late Al-Haj Khan Bahadur  
Akhtar Adil, Double M.A., LL.B., M.L.A.***

***A wise, learned, loving and compassionate person at  
whose feet I learnt the values of life.***

# **ELEMENTS OF ECONOMICS AND THE PAKISTAN ECONOMY**

The Pakistan economy is a developing economy. It is a country which is still in the process of building up its economic structure. The economy is based on agriculture, which is the main source of income for the majority of the population. The industrial sector is still in its infancy, and the service sector is also developing. The government is trying to diversify the economy and reduce its dependence on agriculture. The economy is facing many challenges, such as unemployment, inflation, and a balance of payments crisis. The government is trying to address these challenges by implementing various economic policies. The economy is expected to grow in the future, but it will require a lot of effort and investment.

## THE LATE MR. AKBAR ADIL

The National Book Foundation records with deepest regret the death of Mr. Akbar Adil, author of this book, on December 21, 1976.

A dedicated patriot, he laboured for years on this publication which he believed would serve as a textbook and also guide the present and future generations of Pakistanis in understanding the politico-economic problems of the country which he served with such zeal and devotion as a distinguished economist and official.

Tragically, he did not live to see the fruit of his endeavour, which will perpetuate his memory for countless friends and admirers in Pakistan and abroad.

## INTRODUCTION—I

I welcome the publication of Mr. Akbar Adil's 'Elements of Economics and the Pakistan Economy'. The study covers a very wide area and provides a rounded account of most aspects of Economic Theory and Pakistan economics. The book is, in fact, in the genre of descriptive interpretation and is meant to inform and enlighten both the students and teachers of economics and the general public.

It is an unusual study in the sense that it combines several subjects but the presentation is coherent and stimulative. The author has a pronounced preference for the simple and direct approach which makes his book highly intelligible and readable. Mr. Adil has been a teacher as well as a civil servant. He distinguished himself in both capacities. The present study is, on the whole, characterised by a clear grasp of the subject and a deep insight into policy making.

PROFESSOR EHSAN RASHID.  
Ph.D.,  
Vice Chancellor,  
University of Karachi.

M. A. QURISHI

Director

Department of Economics

## INTRODUCTION—II

Mr. Akbar Adil's book deals with three principal subjects, namely economic theory, economic history of nations, and the Pakistan Economy. It begins with the definition of economics and an exposition of micro and macro economic theory. The historical experience is classified into six stages of growth. Various aspects of the Pakistan economy are analysed in depth. Each chapter pertains to one broad sector of the economy and the discussion invariably starts with a review of the theories relevant to the subject matter of the chapter.

The book uses an institutional approach that relies on a description of the existing reality, careful economic analysis and an understanding of administrative, political and social constraints. Model building and econometric models are implicitly rejected due to the weak data base and the difficulties in measuring political and social variables in Pakistan. The institutional approach yields a model of sorts which is controversial but which yields valid policy recommendations when its underlying parameters are realistic. Many readers may not share the chosen analytic approach or its application. However, it is always worthwhile to have an alternative methodological approach to decision-making.

The book offers the kind of fresh and pragmatic insights into current economic problems facing Pakistan and should attract the attention of a wide range of practising economists as well as interested laymen. In addition, the book may be used by students in courses on economic development, Pakistan economics, or economic theory.

M. L. QURESHI,  
Director,  
Pakistan Institute of Development Economics.

# CONTENTS

Preface	PAGE
<b>CHAPTER</b>	
1. Introduction to Economics .. .. .	1
2. Economic Terms .. .	7
3. Production .. .. .	13
4. Law of Diminishing Utility .. .. .	17
5. Supply and Demand .. .. .	21
6. Laws of Production .. .. .	29
7. Stages in Evolution of Economic Life .. .. .	35
8. Characteristics of Under-Developed Countries .. .. .	39
9. Population .. .. .	45
10. Monopoly .. .. .	55
11. Imperfect Competition .. .. .	61
12. Theory of Consumption .. .. .	65
13. Rent .. .. .	69
14. Wages and Labour Problems .. .. .	73
15. Interest .. .. .	99
16. Profit .. .. .	107
17. Money, Banking and Income Determinants .. .. .	111
18. National Income .. .. .	183
19. International Trade and Aid .. .. .	201
20. Public Finance .. .. .	289
21. Agriculture .. .. .	371
22. Industry and Power .. .. .	427
23. Transport & Communications .. .. .	489
24. Planning and Development .. .. .	513



## PREFACE

It is rather difficult to sufficiently express one's deep gratitude to the Almighty for all the rich life and still richer experiences with which He has blessed some people. The least such people can do is to share their accumulated knowledge and experience with their fellow-beings freely and without fear or favour. This book is some such attempt.

Economics is a fascinating subject inasmuch as SCARCITY and CHOICE pose a fundamental human problem in almost all parts of the world. In addition, the economic and other developments in Pakistan and abroad during the past 27 years or so have had a profound impact on the lives of our people and do merit serious study. We have never had a dull moment and life has always been exciting, although we could well have done without some of this excitement.

I took about three years to complete this work. And these were years in which one could sit back and reminisce and ruminate over the travails and the tribulations of the past and the present. The book is an attempt to provide a standard text book on the Elements of Economics and the Pakistan Economy. It should also be useful to the policy-makers, administrators and those engaged in the more mundane matters of production and money-making. I have deliberately avoided indulging in complex economic jargon for the idea is to make things easier to understand and analyse. The information in the book has been updated till 1975.

My family and friends have been a source of strength in the task which confronted me in collecting material for this book. Major General M. Rafi Khan, Aftab Akhtar, S.M. Jaleel, Momina Adil, Salma Adil, and even little Saleem Adil enthusiastically supported and sustained my efforts in this regard. I am also grateful to Mr. and Mrs. E. I. Davis for going through the draft. The detailed editing was undertaken by my old colleague F.D. Douglas and I must record my warm appreciation for all the long hours he spent on this job.

Yunus Said, Managing Director of the National Book Foundation, has taken a keen and personal interest in the expeditious publication of this book, and for this I am grateful. I am also grateful to Begum Naheed Azfar and Deputy Director Yaqub of the National Book Foundation for their contribution towards the publication of the book.

Although I must have written thousands of pages for various governmental and other publications, this is my most comprehensive attempt at Economic writing. The occasion is, therefore, appropriate to acknowledge with deep and undying gratitude all the knowledge that has been imparted me by my teachers ever since I was a child. I was very fortunate indeed in the matter of my teachers (listed below) who were without exception very kind and helpful to me.

- |                           |   |  |
|---------------------------|---|--|
| Private Tutors            | : | Maulana Aulad Ali, Maulana Ibadullah and Maulana Hamid Ali.  |
| St. Peter's College       | : | The Rev. Father Heyacith, Father Louis, Principal E.S. Merriman, A.E. Finimore, B.L. Sharma and Colonel B.G. Ireland.  |
| Agra College              | : | Principal H. Krall, Vice-Principal Dr. Mehta, Professor M.S. Sundaram, and Professor Misra.  |
| Aligarh Muslim University | : | Dr. Sir Ziauddin Ahmed, Professor Colonel Haider Khan, Professor A.B.A. Haleem, Professor L.K. Hyder, Sheikh Ataullah, S. Majeeduddin, Khan Bahadur Professor Abdul Majeed Kureishi, Professor F.J. Fielden, Professor Rasheed Ahmad Siddiqi, Professor Khawaja Manzoor Hussain and Mukhtar Hamid Ali. |

Lucknow University : Professor D.P. Mukerjee, Professor Dr. Radha Kamal Mukerjee, Professor D.N. Majumdar, Professor N.K. Siddhant, Professor M. Shameem, Rai Bahadur Bhujanga Bhushan Mukerjee and M. Sultan.

London School of Economics and Political Science : Professor Lionel Robbins (now Lord Robbins), Professor Friedrich von Hayek, Sir Alexander Carr Saunders, Professor Harold Laski, Professor Meade, Dean L.G. Robinson, Dr. Vera Anstey and Professor R. C. Tress.

Administrative Staff College, Lahore : Principal S.M. Khan and Prof. U. Karamet

Economics and Politics are closely intertwined. It is unfortunate, though, that what is politically desirable is generally not feasible from the economic point of view. The challenge of providing sustained and viable economic progress under the aegis of a freely elected and representative political government is a formidable one, and yet it can be successfully met if people are taken into confidence and informed of the harsh realities of life in a simple and honest fashion. I have attempted to be as analytical and as objective as is humanly possible, but in a work of this kind I suppose it is rather difficult to avoid those subjective influences which are ingrained in the subconscious.

AKBAR ADIL

# Introduction To Economics

## Meaning of Economics

The definitions of Economics generally fall in two broad categories. The older definitions lay stress on **WEALTH** and **WELFARE**. The second category have a more exact and scientific approach, namely, relating the scarcity of resources, which have alternative uses, to the satisfaction of human wants.

**Adam Smith**, the father of Political Economy, defined Economics as a subject concerned with "an enquiry into the nature and causes of the wealth of nations." He wrote a book bearing this title in 1776. Adam Smith stressed Economics as the Science of Wealth. The popular meaning of Wealth is riches or money. This definition gave rise to serious misgivings regarding the concept of Economics and prominent writers like Carlyle and Ruskin thought of Economics as a **dismal and selfish Science**. They did not clearly understand the scope of Economics nor understand the real meaning of Wealth. Economics does deal with Wealth but it deals with it only so far as Wealth is necessary to the satisfaction of human wants. Wealth is not an end in itself. It is only the means to the end, which is the satisfaction of human wants.

About a hundred years after Adam Smith, **John Stuart Mill** defined Economics as a "subject which studies the nature of Wealth and the laws which govern its production, distribution and exchange." This definition was an improvement on the Adam Smith definition since it also emphasised the major components of the subject-matter of Economics.

**Alfred Marshall** (1842—1924) was the first Economist to emphasise in his definition of Economics both **WEALTH** and **MAN**. The earlier Economists, who are called Classical Economists, had not dealt with the human aspects of Economics. Marshall defined Economics as follows:

"Political Economy or Economics is a study of man's actions in the ordinary business of life: It enquires how he gets his income and how he uses it.... Thus it is on the one hand a study of wealth, and on the other, and more important side, a part of the study of man."

Marshall is in a way in the direct line of descent of Adam Smith because he emphasises **WEALTH**, and Adam Smith regarded Economics as an enquiry into the nature and causes of the wealth of nations. The major addition to Economic Thought by Marshall was that he recognised the subject as a part of the study of human behaviour.

Marshall's definition has been criticised by some people on the following grounds:

1. It is rather narrow and emphasises only a particular aspect of human life and behaviour, whereas Economics deals with a larger subject-matter.
2. It is restricted to the material concept of wealth. Wealth can also take non-material forms. It has also not been stated clearly what is material and what is non-material.

The most precise and scientific definition of Economics has been given by **Professor Lionel Robbins**. Robbins defines Economics as "the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses."

The main components of Robbins's definition are:

- i) Human needs or 'ends' are almost unlimited.
- ii) Resources or 'means' to satisfy all needs or 'ends' are limited,
- iii) Scarce resources or scarce 'means' can be put to alternative uses. In other words choice has to be exercised in order that the scarce means are utilised in a most satisfying manner.

The definition of Robbins is of universal application since be it a rich country or a poor country, resources are always deficient in relation to the countless demands made upon them. Even a rich country like the United States of America cannot spend all that it actually wants to spend on

Defence, Economic Development and Social Welfare. Russia also has to make a choice between more guns or more butter. A labourer has to make a choice on whether he wants better shelter or more fun, like going to the cinema. A rich man is plagued with choice between various kinds of investment as also the division of his resources between investment and leisure. Thus, wherever we are and whoever we are, we have to live with the problems created by limited resources in relation to almost unlimited needs and the fact that those resources can be put to alternative uses. The definition of Robbins provides for a scientific approach to Economics because scarcity and choice are sufficient foundations for the construction of Economic Theory.

## **Scope and subject-matter of Economics**

### **Production, Exchange, Consumption and Distribution**

The scope of Economics indicates the fields covered by the subject-matter of economics.

Economics studies the activities of **social** and **normal** human beings. Robinson Crusoe or Alice in Wonderland would not be studied under Economics. Although the totality of individuals constitutes society, yet economic phenomena have to be studied with reference to groups and not with reference to isolated cases.

Economics deals with all activities of MAN which are concerned with the earning and spending of money-incomes. Economic activity varies from person to person and from place to place. Our going to the club to play golf is not Economic Activity but when the professional Arnold Palmer plays golf it is Economic Activity. When a peasant woman brings water from a village well it is not Economic Activity, but when water is distributed by the Karachi Development Authority it does become Economic Activity. Economics studies Man only in his Economics aspect and deals only with his Economic Activity. Economics studies all those activities of Man which aim at the production of scarce things, that is wealth. All activities which can be related to the measuring rod of money are the subject-matter of Economics.

Generally speaking the subject-matter of Economics can be divided into four parts:

- i) Production,
- ii) Exchange,
- iii) Consumption, and
- iv) Distribution.

Goods and Services are produced for consumption, but modern production is not for direct consumption by the producer. The producer sells his production to consumers and this involves the system of Exchange.

#### **PRODUCTION**

Production literally means making or creating things, but in Economics it means creating utility. Thus when an industrialist converts cotton-yarn into cloth, or cloth into shirts or tobacco into cigarettes, this activity is classified under Production. In Economics, Production is used in a wider sense to cover all activities which yield useful results and which can be related to the measuring rod of money, whether they are embodied in material objects or not. Thus the washerman who washes our clothes or the news-boy who sells newspapers is as much a 'producer' as the cook who prepares food or the pilot who flies a Boeing or the textile mill-owner who manufactures cloth. Phrases like "Methods of Production" and "Productive Process" are all related to creating additional utility.

#### **EXCHANGE**

Exchange and Barter means the same thing that is, the act of accepting one thing for another. It mostly means transactions involving money. Exchange is one of the important components of Economics. Economics study the ways and means by which a great diversity of exchanges take place in the economy.

## CONSUMPTION

Consumption implies the using of consumer goods and services namely, the using of utility. Consumption is also sometimes used to describe the using of all Economic Goods. Economic Goods are either Consumer goods or Capital Goods. Capital Goods are consumed to produce other goods. Capital goods are also called Production Goods.

## DISTRIBUTION

Distribution means the division of the National Income amongst the factors of production which co-operate to produce that income. RENT is given for LAND, WAGES are given for LABOUR, INTEREST is given for CAPITAL, and PROFIT is given for ORGANISATION. Distribution is also used to refer to that part of trade which is responsible for the movement of goods from producers to consumers.

## Importance of Economics

The importance of Economics and the need to study it is apparent from the very definition of Economics. Economics deals with the earning and spending of money-incomes. It deals with the activities of social and normal human beings. Last, but not least, it deals with the allocation of scarce resources which have alternative uses; this emphasises the element of CHOICE. This element of choice is a major factor in the life of everybody—Economists, Finance Ministers, Industrialists, Businessmen, Shopkeepers, Farmers, House-wives, Intellectuals, Students, etc. etc. They all have to exercise CHOICE in the allocation of the resources available to them. It should be mentioned that TIME is also a scarce resource, and we have to allocate time between WORK and LEISURE. In recent years there has been a good deal of research on "The Economics of Leisure".

Knowledge of Economics is essential to the officials in government. They have to plan and make Economic Policies so that adequate DEVELOPMENT, DEFENCE, CONSUMPTION and SOCIAL WELFARE (Health, Education and Housing) are ensured for the people at large. Again without a sound knowledge of Economics, government officers cannot undertake international economics relations, including trade and aid, on sound lines.

Businessmen and industrialists should also have a good knowledge of Economics to enable them to organise their production and marketing with a view to maximising their profit and at the same time exercising reasonable judgement for providing for social welfare.

Workers, particularly trade union leaders, should understand Economics so that they can demand the wages and other benefits which are their due. A knowledge of Economics would also prevent them from making unreasonable demands. Since the participation of workers in management is getting more popular, it is all the more important that they understand the Economic Problems of industrial management.

Farmers and landlords should understand Economics in order to get the most out of the land. They should know which crop to grow and what inputs (Seed, Fertilizer, Water, Labour, Farm equipment and Pesticides) to use. They should also know the relationship between the cost of implements and the added return they get from their use.

Intellectuals and professors cannot afford to live in a world of their own. They have to live with the harsh realities of life. This is also true of students. They should know the Economic resources available in Pakistan and how best they can be developed for the general good. They have the added responsibility to impart this knowledge to others.

An individual with a knowledge of Economics will behave in a more rational way as compared to others. He will ensure that his scarce resources, including TIME, are distributed amongst his varied needs to maximise his satisfaction and welfare.

## Importance of Economics for Pakistani students

Pakistan is basically a poor country. The natural resources available in Pakistan are compared to most other countries, poor. Even these natural resources are not evenly spread over the entire country. Some parts of the country are much poorer than others. When

Pakistan came into being in 1947, the economic and social infrastructure was very deficient. The total installed capacity of power was some 80,000 kilowatts. The availability of water for agriculture and use in the cities was low and the closure of water supplies by India further aggravated the problem. The transport and communication system left a lot to be desired. The railways needed a complete overhaul. The existing roads had to be repaired and new roads built for providing reasonable transport facilities. We had practically no shipping. The ports required urgent renovation and expansion. Similarly, on the social side, Education (particularly technical education), Health services and Housing (especially for millions of refugees who migrated from India) were sorely lacking. Banking and Commercial services were also paralysed by the exodus of Hindus. The basic production facilities were either antiquated or just did not exist. At the time of independence there was no industry worth the name in Pakistan. The agricultural economy was still run by primitive methods with the result that yields per acre of various crops were low.

It is quite obvious that Pakistan had to make a determined start to develop its economic and social infrastructure and its production. The economy had to be developed and developed fast to meet the revolution or rising expectations because people thought that with the advent of Pakistan the millennium had arrived. National Income had to be increased. The extent of poverty had to be reduced to provide the three basic wants of food, clothing and shelter. Health services and education facilities, particularly those of technical education, had to be improved. Transport and Communications had to be developed. Extensive measures had to be taken to increase agricultural production and industrial growth. All this could not possibly be done with our own meagre resources. Foreign aid and loans were taken to supplement these resources. Economic Planning was done with a view to strengthening the economic and social structure of the country. Besides all this, Defence requirements made large demands on our meagre resources.

The importance of the study of Economics for Pakistani students cannot, therefore, be over-emphasised. Economists have to decide on the allocation of scarce resources which are limited in relation to the numerous demands made on them. The problem of CHOICE is indeed difficult and requires a sound knowledge of Economics to be exercised carefully so that we can have optimum Development, Defence, Consumption and Social Welfare.

## **System of Economics in Pakistan**

The nature of Economic Life under a particular social system is called the Economic System. One system differs from another to the extent to which the government participates in the Economic Life of the country and the attitude of the government towards the institution of private property. Another very significant difference is the extent to which the market forces of demand and supply and self-interest are permitted to operate in the economy. There are four main types of Economic Social Systems: CAPITALISM, COMMUNISM, SOCIALISM AND SYNDICALISM.

CAPITALISM is the economic system in which the means of production are wholly or substantially privately owned. In our times capitalism has produced rather varying combinations of ownership and free interplay of market forces. Literally, Capitalism means a system that stresses the accumulation and use of capital. Capitalism in Economic terminology implies private ownership, self-interest expressed through the profit motive, and a relatively free market in which entrepreneurs can enter any kind of market they wish and the private sector can make the most of its decisions. Capitalism is always associated with a high degree of political and social freedom, but this may not always be so. In Fascist countries there is hardly any political and social freedom, although the means of production are substantially privately owned. Capitalism in its near purest form exists in the U.S.A., Western Germany, Singapore and Canada, although even in the case of these countries there are regulatory agencies which enforce economic and social regulations, and there is also a growing demand to introduce some form of economic planning. There are other industrialised countries like the United Kingdom, France and Italy where most production is in private hands, and governments own or operate

key companies or industries such as coal and iron and steel in the U.K. These countries also draw up national economic plans setting broad production targets for key industrial sector and attempting to channel investment into the most desirable areas through persuasion, and tax and lending policies rather than by direct orders. Then we have the Japanese system which is a mixture of capitalism and feudalism. Here the means of production are almost entirely in private hands but industry is heavily cartelised and is subject to government administrative guidance. Industrialists in Japan have tremendous influence on government and can easily secure favours, such as light taxes and easy credit from state-connected institutions. Finally, we have the Scandinavian system which has been described as welfare capitalism or free enterprise Socialism. Ninety per cent of Swedish production is privately owned, but profits and incomes are taxed at rates upto 80 per cent to support a wide assortment of social services. Wages are set by a national bargain reached through negotiations between employees' associations and labour unions and ratified by the government.

**COMMUNISM** implies that the ownership of all the means of production, exchange and distribution is vested in the community as a whole. There is practically no private property. The ideal of Communism is "from each according to his ability, to each according to his need."

**SOCIALISM** is the economic system in which a substantial portion of the means of production is owned by the State. Both Communism and Socialism imply rigid centralised planning of production, prices, investment, employment, foreign trade and consumption. The planning bureaucracy decides what is in the national interest and it is so produced and distributed. These systems are generally characterised by a denial of political and social freedom as we understand it.

**SYNDICALISM** is a system in which the means of production are owned or controlled by the workers.

In Pakistan we have a **MIXED ECONOMY** as have most countries with a free enterprise system akin to capitalism in one form or another. We have a private sector as well as a public sector. Railways, airlines, posts and telegraphs, telephones, electric power, water, education and health sectors are owned and run by the State. Road transport falls both in the public and private sector, Shipping and banking have been nationalised. Life insurance is nationalised but other types of insurance are privately owned. Heavy industry is generally run by the State but light and medium industry is privately owned. The agricultural sector is privately owned except for basic agro-based industry (wheat and rice milling and cotton ginning). Marketing and distribution are also privately owned except some minor sectors such as petroleum although even here foreign private enterprises are allowed to operate. Thus we have a **MIXED ECONOMY** in which the public sector is quite large but not preponderant. Private enterprise in Pakistan, however, is largely influenced by Government's Economic, Financial, Monetary, and Administration Policies. Pakistan has a well-established Planning Commission at the federal level with corresponding Planning and Development Boards at the provincial level. Planning is not rigid and by no means conforms to the orthodox communist or socialist patterns. By and large government regulations are pretty widespread and engulf practically the entire economic scene, yet in mid-1975 it can be stated with confidence that the market forces are permitted to operate within certain limits and that the institution of private property as such is in no immediate danger.

*Note: Cotton-ginning, paddy-husking and flour-milling units were taken over by the Federal Government on July 17, 1976. The owners are to be compensated.*





# Economic Terms

## Wants

Wants mean desire or need for something, without necessarily having the means to make the WANT effective. Human beings have innumerable Wants. The type and quality of such Wants necessarily varies from people to people, from time to time, and from place to place. The Wants of primitive man were simple. With the progress of culture and civilisation the nature of a man's wants becomes more and more diverse and more and more sophisticated.

Wants can be divided into three categories:—

- i) **NECESSITIES:** A person must have the necessities of life if he is to exist. The basic necessities of life are water, food, clothing and shelter.
- ii) **COMFORTS:** Comforts of life refer to those items which make living more comfortable and more meaningful. The availability of Comforts makes for more efficient work and happier living conditions. Reasonable means of transport and communication, health, education and recreational facilities can be regarded as Comforts.
- iii) **LUXURIES:** Luxuries are those wants which one does not really need and without which efficiency is not impaired.

The concept of Necessities, Comforts, and Luxuries varies from person to person, from place to place, from country to country, from one class of society to another class, and from one period of time to another. A scooter is a Luxury to the labour-class; it is a Comfort to the middle-class; it is a Necessity in a large upper-class home where people have to be sent out all the time to make purchases and do odd errands. The provision of heating facilities in the winter is a Necessity in the Quetta region; it is a Comfort in the Lahore region; it would be a Luxury in the Karachi region.

Wants have certain characteristics.

- i) They are unlimited; there is no limit to man's desire for Goods and Services. This is not necessarily an evil phenomenon since it induces Man to greater effort and to greater initiative to improve his lot.
- ii) A particular Want can be satisfied for the time being: If a man is hungry he can eat food and if he is thirsty he can quench his thirst by drinking something liquid.
- iii) Wants are complementary : The satisfaction of some human wants needs the consumption of two or more items. If somebody wants to have tea, he normally requires hot water, milk, sugar and tea-leaves.
- iv) Wants are competitive: Since wants are unlimited and the resources available to satisfy them are limited, Man has to exercise Choice. Wants which command a high priority for the individual concerned are satisfied first.
- v) Wants can be satisfied by alternative means: A hungry man can satisfy his hunger by eating food or by consuming fruit or milk. A tired person seeking recreation can go to the cinema or go window-shopping.
- vi) Most Wants always recur: The desire for food, clothing and recreation is a recurring phenomenon. Some wants like the desire for a residential house need not recur.

## Goods

GOODS imply everything which is useful to MAN and which is exterior to him, be it material or immaterial. The term Goods does not imply an ethical meaning. A commodity

may be harmful to a man or its consumption may be evil, yet if it is desired by man it will be termed as Goods.

Goods can be divided into two categories:

- i) **FREE GOODS;** and
- ii) **ECONOMIC GOODS.**

**FREE GOODS** are those things external to man which are useful and in such large supply that they can be obtained in as large a quantity as desired without conscious effort. Free Goods are unlimited in relation to the desire for them and there is therefore, no element of Choice. Free Goods are provided by nature without any human effort. They include fresh air, rainfall, and sunshine.

**ECONOMIC GOODS** are anything, material or immaterial, which are useful to man, and which are scarce. Economic Goods are always scarce and limited in relation to the demand for them. They require production, availability and a conscious effort. Free Goods are sometimes converted into Economic Goods, as, for example, oxygen in cylinders or in a submarine and water in the cities. In Economics we deal with Economic Goods and not with Free Goods. Scarcity and Choice can be applied to build up theories around Economic Goods. The building up of such theories around Free Goods would indeed be an almost impossible task.

**ECONOMIC GOODS** and **FREE GOODS** have been classified in a number of ways. The more important of those classifications are:

- i) **MATERIAL GOODS and NON-MATERIAL GOODS.**

**MATERIAL GOODS** are those Economic Goods which have a physical presence in the sense that they have weight, size and occupy a place. They can also be bought and sold. Wheat, radios, books and shoes are Material Goods.

**NON-MATERIAL GOODS** are those goods and services which serve man's wishes and desires, such as the services of teachers, doctors, servants, labourers and businessmen.

- ii) **TRANSFERABLE and NON-TRANSFERABLE GOODS.**

**TRANSFERABLE GOODS** are those goods which can be transferred from one place to another, such as machinery, clothing and carpets.

**NON-TRANSFERABLE GOODS** are those goods which cannot be transferred from one place to the other, such as land, houses, rivers and mountains.

- iii) **PERSONAL GOODS and IMPERSONAL GOODS.**

**PERSONAL GOODS** are those goods which cannot be separated from a person, such as a student's diligence, a doctor's skill, a teacher's intelligence, and a pilot's bravery.

**IMPERSONAL GOODS** are those which can be separated from the individual such as clothes, jewellery, socks and watches.

- iv) **DURABLE GOODS and PERISHABLE GOODS.**

**DURABLE GOODS** are those goods which can be used over a relatively long period of time such as a motor-car, radio set, refrigerators, crockery and cutlery, and clothes.

**PERISHABLE GOODS** are those goods which disappear in the moment of their consumption, such as food and drink items. Sometimes the term Perishable Goods is also applied to those items which do not last long unless they are preserved, such as fish, meat, milk, and fruit.

- v) **PRIVATE GOODS and PUBLIC GOODS.**

**PRIVATE GOODS** are those which are owned by private individuals or private institutions.

**PUBLIC GOODS** are those which are owned by the society or government, although private individuals do enjoy them. Public parks, museums, roads, some heavy industries and power houses are illustrations of Public Goods.

vi) **CONSUMER GOODS** and **PRODUCER GOODS** or **CAPITAL GOODS**.

**CONSUMER GOODS** are those goods the utilisation or consumption of which directly satisfy human wants. They may be short-lived or long-lived. Privately owned motor cars and items of food, drink and clothing are Consumer Goods. Coal when used for domestic heating is a Consumer Good.

**PRODUCER GOODS** or **CAPITAL GOODS** are those goods which are used for the further production of other goods. They are wealth which is set aside for the production of further wealth. Coal when used to produce electric power is a Producer Good. Machinery, tools and implements and raw material are Producer Goods.

## Utility

In plain and simple language, **UTILITY** and usefulness means the same thing but usefulness often has an ethical or semi-ethical tinge. In Economics everything which is wanted is useful. The mere fact that anybody wants to acquire and consume an **ECONOMIC GOOD** is sufficient proof of its having **UTILITY**. No moral judgement is implied. Utility is simply the ability or power to satisfy a human want.

Utility does not involve an objective standard of judgement; it is always a subjective concept. Utility is the appraisal of Economic Goods in a given situation by a particular individual.

Although Utility has the capability to satisfy human wants, all utilities are not Economic Wealth. Free Goods such as fresh air and sunshine have enormous utility but are not considered as Wealth.

While Consumption is the using of Utility, Production is the creation of Utility. In the case of Production, utilities are created in the following forms:

i) **TIME UTILITY**: Some items are produced once or twice in a year and then stored for consumption during the rest of the year, like crops. In the off-season they acquire additional utility.

ii) **PLACE UTILITY**: The transport of certain goods from one place to the other increases their Utility. The movement of gold and precious stones from the mines to cities and the transport of wheat from the village to the town are typical examples of Place Utility.

iii) **FORM UTILITY**: The processing or manufacturing of certain things which change their form into a more useful form is referred to as the creation of Form Utility. The conversion of cotton into cloth, of timber into furniture and of steel into machinery are examples of Form Utility.

iv) **ELEMENTARY UTILITY**: When a farmer ploughs his fields and the seed which he sows blooms into flourishing crops, he is said to produce Elementary Utility.

v) **EXCHANGE** or **POSSESSION UTILITY**: Exchange or Possession Utility is said to be created with the transfer of a commodity to the possession of a person to whom it is more useful.

vi) **CONVENTIONAL UTILITY**: The utility of certain things increases when they are used for conventional purposes, such as those demanded by religion and custom. Unsewed cloth has additional utility when used as a shroud. Sugar acquires additional utility when used in making Halwa during the Festival of Shab-e-Barat.

## Wealth

Wealth in the spoken language usually means an abundance of material possessions. Wealth is also used to express abundance. In Economics, **Wealth** means all material and exchangeable means of satisfying human needs. Wealth must have three characteristics:

- i) It should possess utility.
- ii) It should be limited in quantity.

iii) It should be transferable or disposable.

If something possesses high utility but it is available in unlimited quantities it cannot be called Wealth. Again something might possess high utility and its supply may be limited, yet if it is not transferable it cannot be termed as Wealth.

Wealth can be classified in a number of ways according to the distributions which are sought to be made.

Wealth can be divided into Individual Wealth, National Wealth and Communal Wealth. Individual Wealth is wealth of a particular person after taking into account his claims and debts. Communal Wealth is the wealth held by public bodies on behalf of the community, such as roads, railways, parks, libraries and nationalised industries. National Wealth is the wealth of the society as a whole and covers both Individual Wealth and Communal Wealth.

Other classifications of Wealth are as follows:

i) PERSONAL WEALTH (e.g., the skill of a doctor) and MATERIAL WEALTH (e.g., tools); ii) EXTERNAL WEALTH (e.g., goodwill of business), and INTERNAL WEALTH (e.g. voice of a singer); iii) PRIVATE WEALTH (e.g., clothes and Jewellery, and SOCIAL WEALTH (e.g., roads and bridges).

## Value

The concept of VALUE is the central theme of Economics. The term Value is used in two totally different senses, namely, VALUE-IN-USE and VALUE-IN-EXCHANGE.

VALUE-IN-USE is exactly the same thing as Utility. It is something subjective. It varies from person to person. There is no ethical or moral judgement involved. Finally, Value-in-Use or Utility does not imply any notion of scarcity.

In Economics when we talk of Value we refer to Value-in-Exchange. When we wish to talk about Value-in-Use we refer to Utility.

VALUE-IN-EXCHANGE of a commodity means the number of units of other commodities which can be obtained in exchange for one unit of that commodity. In other words, the capacity of something to command other things in exchange is called Value-in-Exchange. In order to command other things in exchange a commodity must have Utility and should be scarce. If something is available in unlimited supply it cannot command other scarce things in exchange for it. Apart from Utility and Scarcity, a commodity, in order to have value, should also be transferable. Naturally, a commodity cannot have a Value-in-Exchange if it is incapable of being used by somebody other than its owner. Thus VALUE-IN-EXCHANGE or VALUE, as it is referred to in Economics, of a commodity is an objective state which indicates that the commodity in question has the characteristics of UTILITY, SCARCITY and TRANSFERABILITY.

## Family Budget-Engel's Law

A Family Budget indicates the distribution of family income over various items of expenditure. These items of expenditure can be classified into Necessities, Comforts and Luxuries. A Family Budget, like any other budget, specifies a particular period of time for which the budget has been prepared. Normally this period is one year. The income of the family is then calculated for this period. Income in this context is taken to mean all incomes (including those from interest and investment) but excluding loans. Finally, the various items of expenditure are listed in the Family Budget. These include the expenditure on food, clothing, housing, light, health, travelling, education, religious and social activities, amusement and miscellaneous.

Study of Family Budgets is of some importance for several reasons. The Family Budget explains the consumption habits of the people and the standard of living depends on consumption. The level of living, in turn, determines the efficiency of the individuals, and on the efficiency of the individuals composing a society depends Economic Progress. Secondly, Family Budgets

are examined by government to impose taxes on certain items of expenditure. Taxes should generally be imposed on those items from which large revenues can be collected with relative ease and which do not impose an intolerable burden on those persons who have eventually to bear these taxes. Thirdly, Family Budgets assist in evaluation of the standard of living of people and the welfare enjoyed by them and form a good base for making policies for the greatest good of the greatest number. Lastly, Family Budgets enable the head of the family to distribute his limited income (scarce resources) on various items of expenditure (competing wants) in order to maximise his family satisfaction.

A Family Budget of the working classes in Pakistan indicates the following pattern of expenditure:

Serial No.	Item of Expenditure	Percentage of income spent
1.	Food	67%
2.	Fuel	10%
3.	Clothing	10%
4.	Housing	3%
5.	Light	1%
6.	Health	1%
7.	Travelling	2%
8.	Education	1%
9.	Religious and Social Activities	2%
10.	Amusement (recreation)	2%
11.	Miscellaneous	1%

This table indicates that the biggest item of expenditure is food. Next in importance are clothing and fuel. Very little is spent on housing and light. There is very little left for health, education and the comforts of life.

ENGEL'S LAW of family expenditure states that the percentage of housing money-incomes that is spent on food is a way of measuring the standard of living, as the lower the income the greater is the percentage spent on food. Engel's Law also suggests that the percentage of the household expenditure spent on comforts and luxuries increases very substantially with the increase in the standard of living.

Engel studied the Family Budgets of 5,000 families and on the basis of his study he formulated the following table:

Item of Expenditure	Proportion of Expenditure		
	Poor Class (Percent)	Middle Class (Percent)	Rich Class (Percent)
Food	62	55	50
Dress	16	18	18
House	12	12	12
Light and Fuel	5	5	5
Education	2	3.5	5.5
Legal Protection	1	2	3
Care of Health	1	22	3
Comforts and Recreation	1	2.5	3.5

The following conclusions emerge from Engel's study:—

i) As the standard of living improves, the percentage of household expenditure on food decreases, and the larger the increase in the standard of living the sharper the decrease in

the percentage of household expenditure on food.

ii) The percentage of household expenditure spent on education, health, legal protection, comforts and luxuries rises very markedly as the standard of living improves.

iii) The percentage of household expenditure on housing, light and fuel remain constant.

The above-mentioned conclusions 'based on Engel' study, are not exactly universally true, but without any doubt they do indicate the trend in the pattern of consumption of various classes of people.

## **Income-Saving-Investment**

**INCOME** can be defined as the monetary and non-monetary return to a factor of production as its reward for productive activity. The income of the four factors of production, namely, land, labour, capital and organisation are called rent, wages, interest and profit respectively. Income always relates to a period. All income is ultimately derived from selling goods and services.

**SAVING** signifies abstinence from consumption. Saving is that part of income which is not spent on consumption. Saving does not imply hoarding. Saving involves the productive use of the funds not spent on current consumption.

In the case of an individual, saving depends upon his income and on what he spends on consumer goods. An individual's desire or will to save is influenced by the following factors:—

i) The level of income and its future expectancy: A person with a low level of income can hardly save anything. If he has prospects of an increase in his income in the near future he will postpone saving till that time.

ii) Expectancy of future expenditures: If a person expects to incur large expenditures on himself or his family in the future he may want to save more.

iii) Prestige and Power of wealth: Some people want to save in order to acquire greater prestige and greater power which accompanies wealth.

iv) Desire to increase future income: Some people save in order to increase their income from investment.

v) Political stability and the existence of saving institutions: The will to save is largely influenced by political stability and the existence of saving institutions like banks, insurance companies and stock exchanges. -

**INVESTMENT** implies the conversion of monetary resources into wealth. Investment actually means an addition to real capital. Investment occurs when a new bus is purchased or a new house or factory constructed.

Mrs. Joan Robinson has very rightly stated that all income is derived either from providing for current consumption or from adding to the stock of wealth, that is, from investment. Thus Income is equal to expenditure on consumption plus investment. Now Saving is the difference between Income and expenditure on consumption, that is, Saving is equal to Income minus expenditure on consumption, or Income is equal to Saving plus expenditure on consumption. Thus it follows that **SAVING** and **INVESTMENT** are always equal over a period of time.

# Production

## Factors or Agents of Production

**PRODUCTION** means the creation of utilities. The making of things as such is irrelevant to economic production, since all activities which yield useful results, whether they are embodied in material objects or not, are included in Production. The shoe-shine boy is as much a producer as the cobbler who mends shoes or the manufacturer who makes them.

The production process or the process of creating utilities requires the services of certain factors which are called **FACTORS OF PRODUCTION** or **AGENTS OF PRODUCTION**. Nothing can be produced without the presence of these factors. There are four factors of Production or Agents of Production: **LAND, LABOUR, CAPITAL, and ORGANISATION**. These can be categorised in two groups: Human Activity and External Aids.

Human Activity includes Labour and Organisation and External Aids include Land and Capital.

The remuneration of the four factors of Production, namely, Land, Labour, Capital and Organisation is called Rent, Wages, Interest, and Profit. The total production of goods and services in the country is called the **GROSS NATIONAL PRODUCT (G.N.P.)**. The total of the remuneration paid to the factors of production in a country is called the National Income. Thus National Income is equal to Rent plus Wages plus Interest plus Profit.

### Land

Land is a traditional and basic factor of Production which embraces all natural resources, the original raw material for production. Defined as a free gift of nature and useful to man it would include air, climate, fields, forests, minerals, fisheries, the sea, etc., etc. This definition includes Free Goods, that is, goods which are available to all without cost and goods which are not scarce. A more useful definition would limit the free gifts of nature to those which are scarce and can be made subject to a transaction of some kind.

The characteristics and importance of Land as a factor of Production are as follows:

- i) Land is a basic factor of Production. Minerals, food, water and raw material for industry come from the land.
- ii) Land cannot be increased and its supply is limited by nature. It is not the result of human labour.
- iii) Land is immovable. It cannot be moved from one place to the other; its products (like timber and fish) are movable.
- (iv) The fertility of Land and its usefulness varies from place to place.
- v) Land is a passive factor of Production. It has to be activated by other factors.

The remuneration of **LAND** is called **RENT**.

### Labour

**LABOUR** is the factor of Production which denotes all human economic efforts, mental and physical, skilled or unskilled, applied to the creation of utilities (namely, production of wealth), and in respect of reward for the effort. The term Labour does not include efforts for pleasure, such as shooting, gardening, or playing games.

Early writers regarded some Labour as unproductive if it did not add to value of the material in production. According to them, Productive Labour would not include lawyers, teachers, soldiers, actors and singers. Today such service producers are regarded as Productive, although indirectly so by saving the time and increasing the efficiency of other labour. While Labour is an important factor of Production in the case of commodities, it is the vital factor of Production in the case of services.

Every human being who is engaged in some form of production, material or non-material, is included in LABOUR. It includes that labour which is pleasant and also that which is unpleasant. Similarly, light or heavy duty, physical or mental effort, part-time work, or involved and intelligent work are all included under LABOUR.

Important characteristics of LABOUR are:

- i) It should be related to the creation of wealth, material or non-material.
- ii) It should be undertaken to obtain remuneration and not for its own sake.
- iii) It is an active factor of Production.
- iv) It cannot be separated from the labourer.
- v) It cannot be stored.
- vi) The supply of Labour is limited.
- vii) The efficiency of Labour varies from person to person.
- viii) Labour is generally not very mobile.

The remuneration of Labour is called Wages.

## **Capital**

CAPITAL is a produced means of Production, or Wealth set aside for the production of further Wealth. Unlike Land, which is a free gift of nature, Capital has to be produced. Generally speaking, Capital is created by sacrificing on current consumption by saving. Thus Capital is accumulated by postponement of enjoyment. In order to save, a person should have the power to save, namely, his income should be large enough to provide not only for his living but also to enable him to save something. Apart from the power or ability to save, a person should have the willingness to save. The ability and willingness to save depends on security of life and property, attractive investment facilities, and a reasonable rate of interest.

In the modern age the importance of having adequate Capital cannot be over-emphasised. Factories and highly sophisticated plants for manufacturing industrial products, efficient means of transport and communication, and tools and equipment for agricultural production are necessary in today's society to improve our lot. Again, industrial raw material as well as huge amounts of agricultural inputs are needed to turn the wheels of the economy. These are Capital in another form. Capital is also the large amounts of money which we need to keep economic activity moving. Thus Capital provides not only the physical means of production but also the raw material required for production, as well as the financing required to generate economic activity.

Characteristics of CAPITAL are:

- i) The supply is limited.
- ii) It is mobile.
- iii) It can be put to alternative uses.
- iv) It yields a return or revenue.
- v) It is productive.
- vi) Capital is prospective in the sense that it means postponement of immediate consumption for future consumption.

The remuneration of CAPITAL is called INTEREST.



## Organization

In Economics we consider MAN as a normal and social individual who has to live in society. Today we are living in the Industrial Age which involves the action and interaction of innumerable groups in order to keep the economy of a country a going concern. The various factors of Production, namely, Land, Labour and Capital have to be got together and organised to produce and then to distribute the goods and services that are not produced.

ORGANISATION is that crucial fourth factor of Production which brings together the other three factors of Production—Land, Labour and Capital. The organiser is the Producer or the Manager. He is indeed the Captain of the production team. In French he is called the Entrepreneur. It is the business of Organisation to enable the various factors of Production to work in harmony as a team, and to exercise economy in production so as to achieve the required quality of production at as low a cost of production as possible. The Entrepreneur has to arrange the availability of land and the availability of Labour of the required skills to ensure maximum production. He has to ensure that the cost of production remains within reasonable limits and that he is able to sell his products at a price which takes care of his cost of production and also leaves him a profit. The importance of Organisation can not be over-emphasised because on the efficiency of Organisation depends the efficiency of Production. Apart from bringing together the requisite factors of production, Organisation also has to distribute the remuneration of the factors of Production. Rent has to be paid for Land, Wages have to be paid for Labour, and Interest has to be paid for Capital. The Entrepreneur also has to try to keep some surplus for himself, after paying the other factors of Production, as a reward not only for his own efforts but for the risk which he has taken. This risk is inherent in most economic enterprises.

The remuneration of Organisation is called PROFIT. Profits are the residue of what is left from sales after payment of Rent, Wages and Interest. It is the business of the Entrepreneur to maximise his profits. The entrepreneur attempts to marshal the various factors of production in such a way that he, as the fourth factor of Production, gets as large a share of the production as possible.

The entrepreneur should ensure optimum production, that is, production at the point where the profits of the firm are maximised. As prices vary from period to period, the entrepreneur also has to provide for flexibility in the production process so that he can vary his output (supply) to the needs of the market as reflected by the market price.

The entrepreneur has to arrange for the sale of his product. Marketing and sale rank equal in importance with production. The building of stocks means locking up so much capital and the entrepreneur has to arrange a sure and steady flow of goods from his unit to the market.

The entrepreneur has to so arrange production as to keep the cost of production as low as possible without impairing the quality of production. He has to exercise cost control and quality control. The quality of production is just as important as the cost of production. It is a gross waste to produce shoddy goods. A good entrepreneur makes a good name for his products and people, more often than not, buy a name which indeed is a great tribute to the concerned entrepreneur.

The entrepreneur should also ensure that the raw material inputs required for enterprise are readily available when needed and they are of the required quality. They should be purchased at the most competitive prices. The unit should also carry sufficient stocks of spare parts.

The maintenance of a healthy and warm relationship between labour and management is another function of the entrepreneur. A contented labour force is an efficient labour force and a more productive labour force. A good entrepreneur thus provides basic amenities to the labour force within, of course, the overall availability of resources.

The entrepreneur has to ensure the availability of capital not only for establishing the enterprise but also for running it. Many good projects have failed for want of adequate

financing. Either sufficient resources were not kept apart for establishing the project or enough provision for running capital was not made. The result has been that the poor entrepreneur has been so engrossed in arranging finances that he has had no time to look to his other affairs which have almost gone by default.

No single man can devote himself successfully to all aspects of the work of his institution. The entrepreneur must, therefore, learn to share responsibility with other members of his team who should be well-chosen. The calibre of the top management reflects the calibre of the entrepreneur himself.

Organisation can take several forms—Joint Stock Companies, Partnership, Cooperative Societies, Individual Ownership, Government-owned Corporations, Government and Public-owned Corporations, etc., etc. In all these cases, however, there is a single person who is the chief executive and it is this person who is generally known as the entrepreneur.

Individual personality has often influenced the course of history and great events too bear the stamp of an individual personality. So is it with economic enterprises. The initiative, capability, ability, drive and integrity of the entrepreneur by and large charter the course of an economic enterprise.

The entrepreneur should ensure that the production and distribution of the product are in accordance with the needs of the market. As a result of this, the entrepreneur should be able to provide the market with the product in the quantity and quality required. The entrepreneur should also be able to provide the market with the product in the quantity and quality required.

The entrepreneur has to arrange for the production of the product in the quantity and quality required. The entrepreneur has to arrange for the production of the product in the quantity and quality required. The entrepreneur has to arrange for the production of the product in the quantity and quality required.

The entrepreneur has to arrange for the production of the product in the quantity and quality required. The entrepreneur has to arrange for the production of the product in the quantity and quality required. The entrepreneur has to arrange for the production of the product in the quantity and quality required.

The entrepreneur should ensure that the production and distribution of the product are in accordance with the needs of the market. As a result of this, the entrepreneur should be able to provide the market with the product in the quantity and quality required.

## Law of Diminishing Utility

**UTILITY** is the ability or power of a commodity to satisfy a human want. Human wants for a particular commodity can be completely satisfied by consuming certain units of it. The first unit of commodity which is consumed would give a high level of satisfaction or yield high utility. The extent of satisfaction derived from consuming the second unit of the same commodity would be less than that enjoyed from the consumption of the first unit. In other words, the Utility derived from the consumption of the second unit is less than that of the consumption of the first unit. Similarly the consumption of the third unit of the same commodity would give even less satisfaction than the consumption of the second unit and the utility is less. Thus we observe that while the total satisfaction obtained from consuming successive units of the same commodity increases, it does so at a diminishing rate.

The utility of one unit of goods or service is called its **MARGINAL UTILITY**. The utility yielded by each successive unit of a commodity which is consumed is called the Marginal Utility of that unit. The concept of the margin is of great importance in economic analysis. The margin is a unitary change, increase or decrease, in an economic aggregate. The theory of Marginal Utility indicates that successive increments of an economic good reduce the value to that individual of every increment processed by him.

Alfred Marshall has stated the Law of Diminishing Utility in the following words:

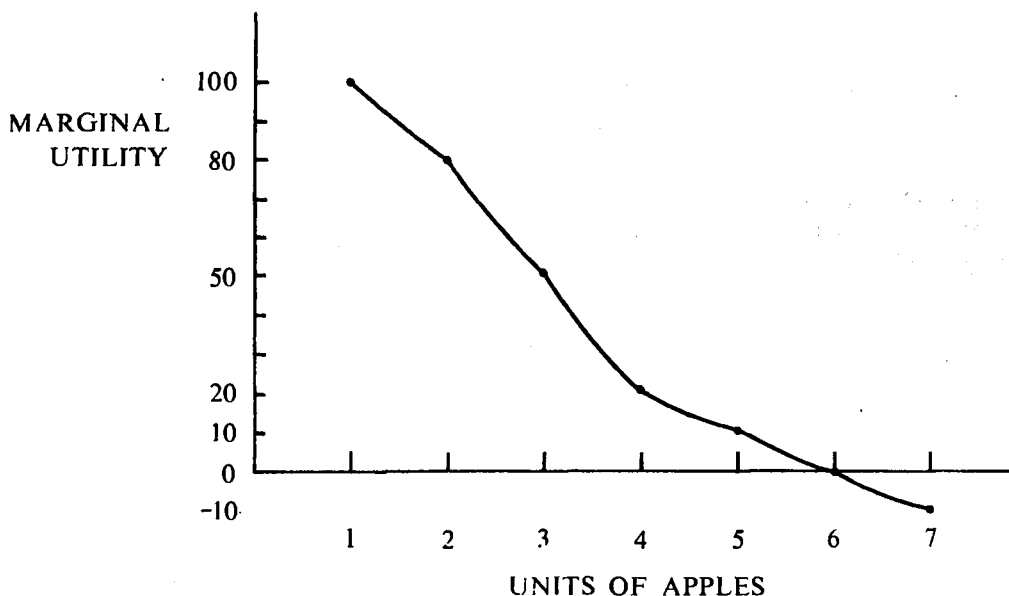
“The additional benefit which a person gets from an increase of his stock of a thing diminishes with every increase in the stock that he already has.”

The Law of Diminishing Utility, which states that while total utility increases with the consumption of the same unit of a commodity, the Marginal Utility derived from consumption of every successive unit diminishes, can be illustrated by an example through a schedule, as below:

*Schedule illustrating Law of Diminishing Utility*

Units of apples	Marginal Utility	Total Utility
1	100	100
2	80	180
3	50	230
4	20	250
5	10	260
6	0	260
7	— 10	250

Diagram



The first apple consumed yields a utility of 100. The marginal utility of the second apple is 80 bringing the total utility to 180. Similarly the marginal utility of the third apple is 50, bringing the total utility to 230. The marginal utility of the fourth apple is even lower at 20 bringing the total utility to 250. The marginal utility of the fifth apple is even lower at 10, thus bringing the total utility to 260. The sixth apple does not yield any satisfaction and its marginal utility is zero. The seventh apple gives negative utility or dissatisfaction—expressed through some uneasiness in the stomach. Its marginal utility is minus 10. Thus we find that the consumption of successive units of apples increases our total satisfaction but this satisfaction increases at a diminishing rate with the consumption of each successive apple.

The Law of Diminishing Utility is subject to the following exceptions, limitations or qualifications:

i) There should be no change in quality or quantity of the unit consumed. If the second apple consumed is sweeter and has a better flavour or is larger than the first apple, then the marginal utility may increase instead of diminishing.

ii) The unit should be consumed in a certain time otherwise the Law of Diminishing Utility will not apply. If there is an interval of ten minutes between the consumption of two units, this interval of time should also be maintained in the consumption of other units. If the second apple is consumed ten minutes after the first apple and the third apple is consumed 30 minutes after the second apple, then the marginal utility of the third apple may well be higher than the marginal utility of the second apple.

iii) The place where the various units of the commodity are consumed should not be changed. On a hot summer's day the marginal utility of the third apple may well be higher if it is consumed in the heat as against the second apple which was consumed in an air-conditioned room.

iv) There should not be any change in fashion and customs or in the mental attitude of the person increased. If a doctor comes to a patient who is eating apples and informs him that the consumption of apples is necessary for his health, it may well be that the next apple

which he consumes has a higher marginal utility than the preceding one.

v) The income of the consumer should not change. While eating apples if somebody informs the consumer that his income has been reduced by 30%, the marginal utility of the next apple consumed may well be higher than the preceding one.

vi) The Law of Diminishing Utility does not apply where the units of a commodity are consumed in a small quantity.

vii) The Law of Diminishing Utility does not apply to rare collections and antiques in which cases marginal utility normally increases.

viii) The Law of Diminishing Utility may not apply if we increase the size of the defence forces if the country is threatened by external aggression.

ix) The Law of Diminishing Utility does not apply in the consumption of certain goods which have social value. The increase in the number of radio and T.V. sets increases their marginal utility to society as such.



# Supply and Demand

## Law of Demand

**WANT** means the desire or need for something without necessarily having the means to make the desire effective. The mere desire to possess a commodity without having the means to acquire it is not a Demand in the economic sense. A demand is always an effective demand that is, desire backed by the capability to pay for it. The demand for economic goods at any time is the amount of it that could be bought at a given price. Thus the demand for a commodity must include the following five elements:

- i) Want or desire to buy that commodity;
- ii) The ability or purchasing power to buy the commodity;
- iii) Physical quality of the commodity or service sought to be acquired;
- iv) Price at which it is sought to be acquired; and
- v) The time at which it is sought to be acquired.

The Demand for an economic good at any time is the amount of it that will be bought at the given price. At different prices different amounts of the commodity will be bought. The table (below) which indicates the amounts demanded at different prices is called a **DEMAND SCHEDULE**. When these figures are represented in diagrammatic form as a curve showing the relationship between demand for a good and price, the curve is called a **DEMAND CURVE**.

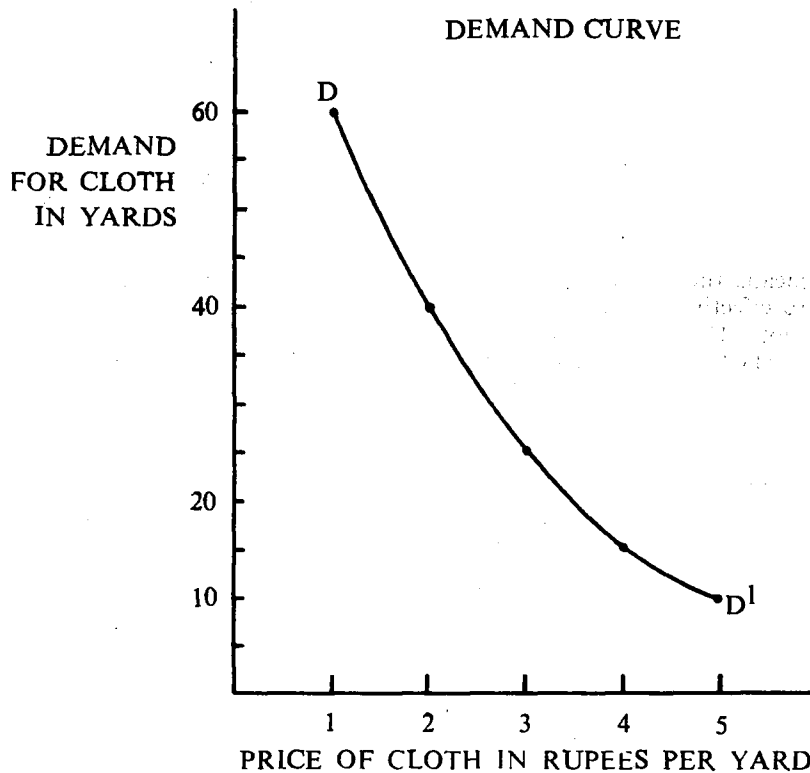
The **LAW OF DEMAND** states that the amount demanded for a good increases with a fall in price and diminishes with a rise in price. The greater the amount to be sold, the smaller should be the price of an economic good. According to the Law of Demand, demand rises when prices fall and demand falls when prices rise. There is an inverse relationship between price and demand. An expansion in price contracts demand and a contraction in price expands demand.

### DEMAND SCHEDULE.

Price of Cloth in rupees  
per yard.

Demand for Cloth in  
yards.

5	10
4	15
3	25
2	40
1	60



At Rs. 5/- per yard the demand of cloth is 10 yards. When the price is reduced to Rs. 4/- per yard the demand for cloth increases to 15 yards. At Rs. 3/- per yard demand is higher at 25 yards and it increases to 60 yards when the price falls to Re. 1/- per yard. Conversely, it can be stated that the demand for cloth is 60 yards when its price is Re. 1/- per yard, decreases to 25 yards when the price rises to Rs. 3/- per yard and the demand is further reduced to only 10 yards when the price rises to Rs. 5/- per yard. The Demand Curve  $D'D'$  slopes down from left to right (North-West to South-East.)

**ELASTICITY OF DEMAND** means the percentage change in demand as a result of a one percent change in price. If a small change in price produces a big change in demand, the demand is said to be elastic. If a big change in price produces little or no change in the demand, the demand is said to be inelastic. The Demand for the necessities of life is generally inelastic, while the demand for the comforts and luxuries of life is elastic. The steeper the slope of the demand curve the more inelastic the demand; a vertical demand curve indicates that demand is inelastic. In the diagram below  $D'D'$  is an inelastic demand curve, while  $D''D''$  depicts a low elasticity of demand and  $D'''D'''$  a high elasticity of demand.

The Law of Demand, according to which demand increases as price decreases and demand decreases as price increases, is subject to the following qualifications and exemptions:—

- i) **There is no change in income:** If the income of an individual increases, his demand for a particular item may increase even if its price increases.
- ii) **The size of the population does not change:** An increase in population may bring about an increase in the quantity of wheat demanded, even if there is a slight increase in the price of wheat.
- iii) **There should be no change in taste and fashions:** If the use of cosmetics becomes more fashionable, fashionable women may demand a larger quantity of cosmetics despite an increase in their price.



iv) **There should be no change in weather conditions:** If it suddenly turns hot, people may demand larger quantities of cold drinks even if their price rises.

v) **The commodity does not have a substitute and it has a derived demand:** The demand for jute may increase even if its price increases, if there are bumper wheat and cotton crops which need to be packed and stored in gunny bags.

vi) **An economic good may suddenly acquire a new reputation:** If this reputation is for the good an increase in price could also be accompanied by an increase in demand. If its new reputation makes the economic good fall from public grace a decline in price may well be accompanied by a fall in demand for it.

vii) **Certain economic goods have snob value:** Those of the upper classes, who are snobbish, demand certain goods because their price is high and they are scarce. If the price of such goods falls the demand for them by the "jet-set" may also fall.

## Law of Supply

The supply of an Economic Good is the amount of it that is offered for sale at a particular price and at a certain time. At different prices supplies will be offered in different amounts by the producers. Supply would be more at a higher price at a certain time since there would be prospects for producers to make a greater gain if they could supply more. On the other hand the amount offered for supply would be less at a lower price at a certain time as the producers would stand gain less and there would be greater risks involved in the process. A table indicating the various amounts offered for supply at different prices at a certain time is called a **SUPPLY SCHEDULE**. When represented diagrammatically it is called a **SUPPLY CURVE**. The Supply Curve goes up from left to right (South-West to North-East).

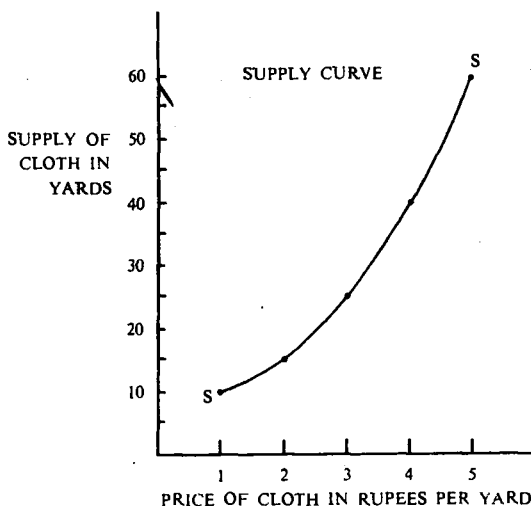
### SUPPLY SCHEDULE

Price of cloth  
in rupees per yard

5  
4  
3  
2  
1

Supply of  
cloth in yards

60  
40  
25  
15  
10



At Rs. 5/- per yard the supply of cloth is 60 yards. When the supply of cloth is reduced to 40 yards the price is Rs. 4/- per yard. At Rs. 3/- per yard the supply is lower at 25 yards and decreases to only 10 yards at Re. 1/- per yard. Conversely it can be stated that the supply of cloth is 10 yards when its price is Re. 1/- per yard. It increases to 25 yards when the price rises to Rs. 3/- per yard, and supply further increases to 60 yards when the price rises to Rs. 5/- per yard. The Supply Curve SS' slopes down from right to left.

The Law of Supply maintains a direct relationship between price and supply. It states that supply at a certain time increases with an increase in price and decreases with a decrease in price. **This is the opposite of the Law of Demand under which the relationship between price and demand is inverse: Demand decreases with an increase in price and increases with a decrease in price.**

Elasticity of Supply means the percentage change in supply as a result of a one percentage change in price. If a small change in price causes a big change in supply, supply is said to be elastic. If a big change in price produces little or no change in supply, supply is said to be inelastic. The steeper the slope of the Supply Curve the more inelastic the supply. A vertical Supply Curve indicates that the supply is inelastic.

The reaction of supply to a change in price largely depends on the nature of the production process, particularly the availability of the factors of production. A producer may not be able to increase supply at a certain time, even if the price rises substantially, because he is working at full capacity and additional factors of production are not readily available. In this case there would be inelasticity of supply. If the production process is more flexible and additional factors of production can be obtained, supply would be able to change with demand, provided the producer so decides.

The time element is of great importance here. The longer the period of time the more likely it is that supply would be able to respond to price changes, particularly when the change is an upward one.

Apart from the lack of flexibility in the production process, another exception to the Law of Supply is the availability of labour in under-developed communities. It has been observed that in these areas the supply of labour often starts diminishing with an increase in the rate of wages after a particular point. After labour has earned enough to meet the where withals of life it starts absenting itself from work and prefers to spend more time with the family or on leisure. In fact even in rich communities there is a distinct trend towards the demand for greater leisure in the form of shorter hours of work and more holidays instead of increased wages.

## Determination of Price under Perfect Competition

It has been very rightly stressed that prices are the allocating and rationing machinery of the economic system. Prices of goods and services not only determine the amount of goods and services that people are prepared to buy, but they also determine the amount in which such goods and services are produced.

Prices are obviously concerned with the eagerness of people to buy or sell in a competitive market. Competition is a relative concept. PERFECT COMPETITION or a PERFECTLY COMPETITIVE MARKET would be one in which there were a very large number of buyers and sellers dealing in similar commodities, who are in close touch with each other, and who conduct their business with complete openness in all transactions. Such a market could not, of course, exist but there are many commodities bought and sold on organised "exchanges" like the stock exchanges, in which the market is as perfect as it can conceivably be. The four conditions for PERFECT COMPETITION or a PERFECTLY COMPETITIVE MARKET are:

i) **A LARGE NUMBER OF BUYERS AND SELLERS.** The number of buyers and sellers must be so large that any one transaction does not appreciably affect the market. It is obvious that if the number of buyers and sellers of a commodity is small, their transactions would not have any effect on the fortune of others.

ii) **A HOMOGENEOUS COMMODITY.** The units of a commodity bought and sold by all buyers and sellers should be similar. This is only possible when the commodity is subject to a definite chemical and physical description, such as iron, copper, tin, or certain qualities of wheat, rice or cotton.

iii) **CONTACTS OF BUYERS AND SELLERS.** Every buyer and seller should know the prices at which transactions are conducted. The prices that the other buyers and sellers are willing to pay or charge should be well-known. Buyers and sellers must also have the opportunity to take advantage of this knowledge. If wheat is cheaper in the Punjab than in Karachi, but the movement of wheat is banned from the Punjab, then the wheat traders of the Punjab and Karachi do not compete with each other.

iv) **NO DISCRIMINATION.** Buyers and sellers must buy and sell freely among themselves without getting or giving any special concession to anybody. There must be nothing of the business of taking Saleem to the back of the shop and telling him that there is a special concession for him and he will be given a discount of 10 per cent.

The marketing of most commodities varies from the Perfect Market to a greater or lesser degree depending on the commodity and service involved and other factors. We will now examine how prices are determined in a Perfect Market.

Prices under Perfect Competition would be determined by the relative eagerness of the buyers and sellers. The more eager people are to buy, the higher will be the price of the commodity. The more eager the people are to sell the lower is the price of the commodity.

If people generally want something very much its price will be high, as the people who do not have it will be willing to give a lot for it, and the people who have it will not be willing to sell unless they get a lot for it. Similarly if people generally do not care much for something its price will be low, as, people who have it will be willing to sell it for little and the people who do not have it will be willing to pay only a little for it.

It is observed that the higher the price charged for an article the fewer units of it will be sold, and the lower its price the more units of it people will buy. There is a definite relationship between the price of an article and the amount demanded for it. The relationship between prices and demand is inverse; the higher the price the lower the demand, the lower the price the higher the demand. By a Demand Schedule, we mean a table indicating the demand for an article and the price of that article. The same relationship shown by a diagram is called a **DEMAND CURVE**. This curve slopes downward from North-West to South-East.

If the price is reduced more will be demanded or, to put it another way, if more of an article is thrown on the market it can only be sold at a lower price.

Different goods vary in the degree to which their uses can increase and decrease with a reduction or increase in price. Elasticity of Demand measures the degree to which sales expand or contract as price is reduced or increased. Elasticity of Demand is the percentage change in demand as a result of a one per cent change in price. When demand is highly sensitive to price changes, it is said to be elastic.

On the supply side, the Supply Schedule or the Supply Curve represents the relationship between the price and the quantity of an article that a seller will be willing to sell. The Supply Curve rises upward from South-West to the North-East. There is a direct relation between price and supplies; the higher the price the larger the supply, and the lower the price the lower the supply.

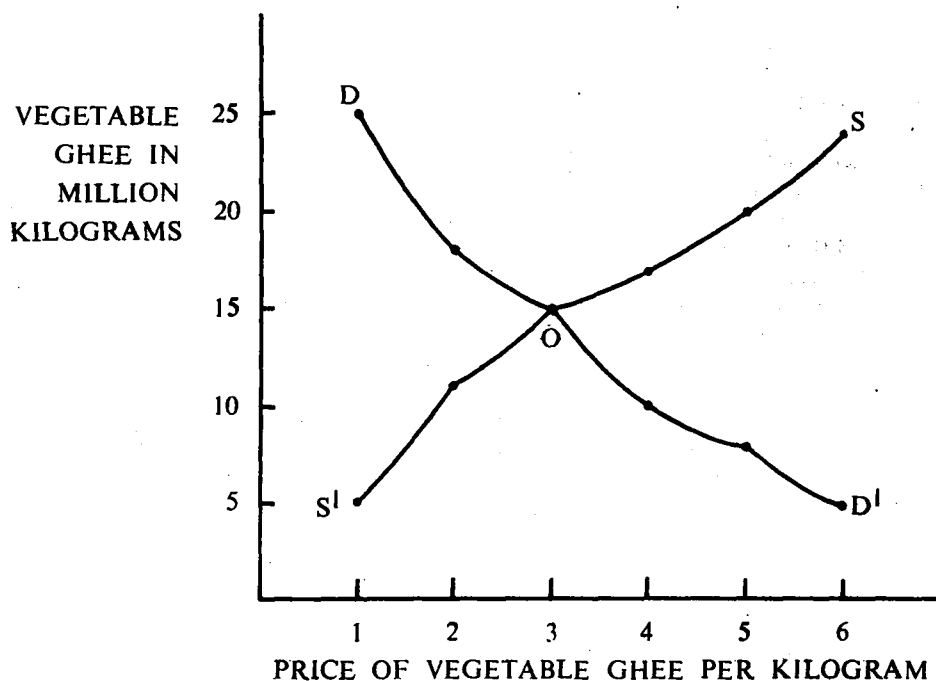
The changes in supply resulting from changes in price, depend on the elasticity of supply. Elasticity of Supply is the percentage change in supply as a result of a one per cent change in price. The reaction of supply to price changes largely depends on the nature of the production process and the availability of various factors of production. The element of time is important here, and the longer the period of time the more likely it is that supply would be able to respond to changes in price, particularly when the change is an upward one.

The market price will be the price at which the quantity supplied and quantity demanded are identical. This is called the position of Market Equilibrium. At any price higher than

the equilibrium, the quantity of supply will exceed the quantity demanded and there will be a downward pressure on price and some sellers will begin to undermine the price. Similarly at any price lower than the equilibrium, the price will face an irresistible upward pressure from the demand side, and some buyers will push up the going price.

The determination of price under Perfect Competition can be illustrated by means of a Schedule and diagram:

Price of Vegetable Ghee (Rupees per pound)	Demand for Vegetable Ghee (million kilograms)	Supply of Vegetable Ghee (million kilograms)
1	25	5
2	18	11
3	15	15
4	10	17
5	8	20
6	5	24



The market price will be at the point of intersection (O) of the Demand Curve DD' and the Supply Curve SS'. At every other point, that is at every price there would either be an upward or a downward pressure from the demand or supply side. The point of equilibrium will be at the price at which demand and supply are equal.

### Concept of Market

Market in every day usage mean a place where things are bought and sold. In Economics the word market has a distinct connotation. A market in Economics implies an area in which a particular commodity commands the same price, except for the cost of transport.

From the point of view of **TIME** there is the **SHORT-TERM** and the **LONG-TERM** market. There is a marked difference between short-term prices and long-term prices. The example of the prices of fruits and vegetables during the holy month of Ramzan readily come to mind. During the month of Ramzan the prices of fruits and vegetables are much higher than in the other 11 months of the year. This is largely due to the fact that there is a substantial increase in demand from the lower and middle income groups who do not buy fruits and vegetables in the same quantity during the other months of the year. Short-term price increases are a source of great public irritation. One practical answer to the problem would be to build up consumer resistance; consumers could refuse to pay the higher price. Of course, if consumer resistance becomes effective enough, shopkeepers might start favouring their regular clients, and favouritism might replace the price mechanism as the rationing machinery of the concerned good. Long-term prices are of great significance to the Economy, and one need not be so morbid as to go all the way with T.M. Keynes who believed that in the long-term we shall all be dead.

Broadly speaking there are four types of markets: **LOCAL MARKET**, **REGIONAL MARKET**, **NATIONAL MARKET**, and **INTERNATIONAL MARKET**.

The **EXTENT OF THE MARKET**, that is, the value of a commodity or service which can be absorbed by the Market at a particular price during a given period of time, is determined by a number of factors. The more important of these are:—

i) **Means of transport and communication:** The ease with which information can be obtained and transmitted with regard to the availability and price of a commodity has a direct effect on the size of its market. The ease of transporting a commodity also has a direct impact on the size of the market. Cheap and effective means of transportation encourage the building up of a large market.

ii) **Nature of the Commodity:** A commodity which can be easily standardised would tend to have a large market. Commodities which are perishable will not have a large market unless special transport facilities exist for their movement. Again, commodities which by their very nature are in great demand will tend to have a large market.

iii) **Political and Administrative Obstructions:** A commodity tends to have a large market if there are no political and administrative obstructions to its movement over district or provincial or national borders. Import duties, sales duties, and import restrictions hinder the free movement of goods and thus contract the size of the market. Within a country octroi duties, toll taxes, and administrative restrictions on the movement of goods hinder the growth of the market.

iv) **Political stability and security:** Political stability and security are necessary for development of the market, for without these markets are restricted owing to the risks involved.

v) **Financing arrangements:** The availability of adequate financing arrangements assist in expanding the market since the availability of credit facilities is a great help in the marketing process.

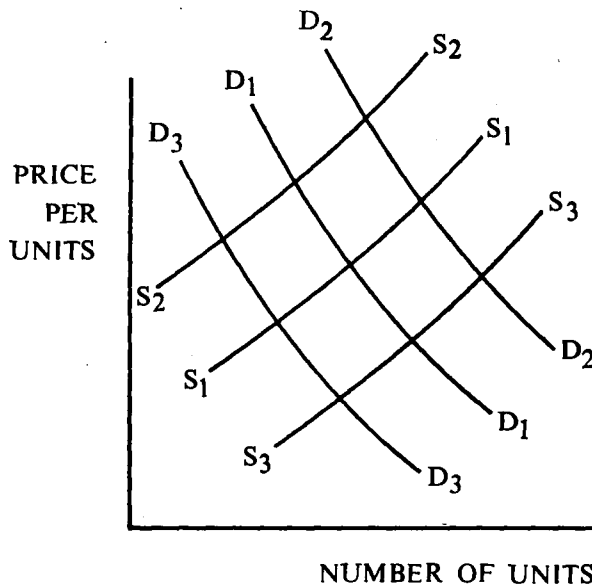
vi) **The extent of the division of labour:** The greater the division of labour the larger the size of the market. Greater division of labour implies greater specialization. Greater specialization means less self-reliance and greater dependence on exchanging one's own surplus with the surpluses of others. If an individual, or a locality, or a community, or a province, or even a country is fully self-sufficient there would be no exchange and the extent of the market would be limited to the individual, or the locality, or the community, or the province, or the country concerned. Thus the greater the degree of specialization the greater the extent of the market. It is also equally true to say that the extent of specialization depends on the extent of the market, or, to put it simply, the ease with which large quantities of the article produced can be sold.

vii) **Density of population:** If a large number of people live together it is easier to make exchanges than it would be amongst widely scattered populations. Thus densely populated areas attract a much larger market as compared to sparsely populated areas.

## Effect of Changes in "Quantity demanded" and "Quantity supplied".

In Economic terminology there is a distinct and marked difference between a "rise in demand" and an increase in the quantity demanded. When the quantity demanded rises as a result of a fall in price there is no change in the demand curve or in the demand schedule. An increase in "quantity demanded" means an increase in demand at every price and the demand curve shifts bodily to the right. Similarly a decrease in quantity shifts downward.

In the case of supply an increase in the "quantity supplied" means an increase in supply at every price and the supply curve shifts upward. Similarly a decrease in the "quantity supplied" implies a decrease in supply at every price and the supply curve shifts downward.



In the diagram above  $D_1$  and  $S_1$  are the original demand and supply curves respectively.  $D_2$  represents an increase in "quantity demanded" and  $D_3$  a decrease in "quantity demanded".  $S_2$  represents an increase in "quantity supplied" and  $S_3$  a decrease in "quantity supplied". The points of intersection of the relevant demand and supply curves will represent the prevailing market price.

## Laws of Production

**PRODUCTION**, in the Economic sense, always implies that the motive for production is profit. This is true of production in a capitalist system or a socialist system or in a mixed economy. **PROFIT** is the residue or the difference between the selling price and the cost of production. The efficiency of production is measured by the extent of profits.

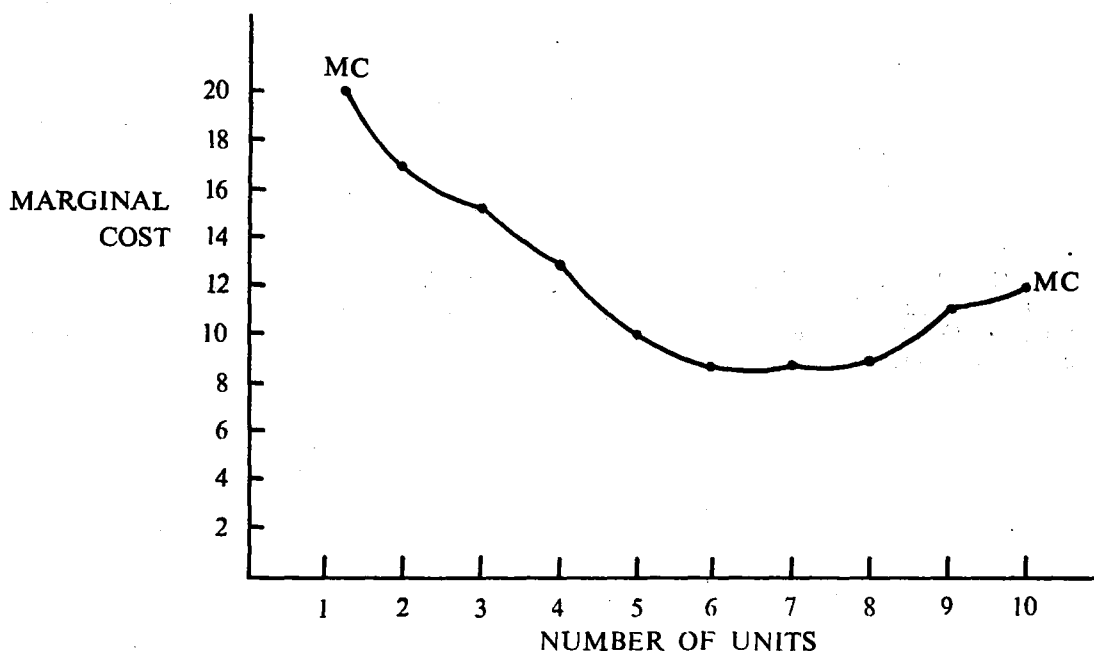
The sales or revenue (R) of a firm are equal to the number of units produced, or Quantity (Q) multiplied by Price. Thus  $R=QP$ . The revenue of a firm, therefore, depends on two factors: i) Quantity produced (Q) and ii) Price (P). The revenue of the firm can increase with an increase in production, or an increase in price, or an increase in both.

The cost of production of a firm represents the expenditure incurred by the firm on the production of a given quantity of output. Total cost consists of two elements: **FIXED COSTS (FC)** and **VARIABLE COSTS (VC)**. Thus  $TC=FC+VC$ . Fixed Costs are not related to the quantity of production but are by their very nature of a permanent type. Fixed Costs include the rent of land, interest on capital, and salary of management. Variable Costs consist of the wages of labour and the cost of raw material required for the production process. The items included under cost are generally referred to as inputs. Profits are, therefore, equal to Revenue minus Total Cost, or Value of Output minus Value of Inputs.

As the scale of production increases, the cost of production per unit decreases up to a certain point because fixed costs are spread over a larger number of units and the internal and external economies of production come into full play. As production continues to increase, the economies of scale get exhausted and a position is reached in which the cost of production per unit remains constant. If production continues to increase further the cost of production per unit begins to increase.

As production increases total costs increase, but they increase at a diminishing rate. This stage is the stage of **INCREASING RETURNS** or **DIMINISHING COST**. With each successive unit of production total cost increases, but the marginal cost of each successive unit decreases. When the economies of scale have been exhausted, production reaches the stage of **CONSTANT RETURNS** or **CONSTANT COST**. At this stage the total cost increases but the marginal cost of each successive unit is the same. After this we come to the stage of **DECREASING RETURNS** or **INCREASING COST**, when the total cost is increasing and the marginal cost of each successive unit is also increasing.

Number of Units	Total Cost	Marginal Cost
1	20	20
2	37	17
3	52	15
4	65	13
5	75	10
6	84	9
7	93	9
8	102	9
9	113	11
10	125	12



In the above diagram it is clear that the marginal cost is U-shaped. Upto the sixth unit of production there are increasing returns or decreasing cost; from the sixth to the eighth unit of production there are constant costs and constant returns; after the eighth unit there are increasing costs and decreasing returns.

The Law of Production which identifies the phenomena of increasing returns, constant returns and decreasing returns are equally applicable to our daily life. When we start work fresh in the morning, after a good night's sleep, our output continues to increase to a certain stage, after which it becomes constant, and then it begins to decline.

The size of the producing unit is generally determined by the size of the market available for the sale of the product of that unit, the machinery and technology required in the production process, and the availability of financial resources for the enterprise.

The advantages that accrue from large-scale production are generally stated under two heads: **INTERNAL ECONOMIES** and **EXTERNAL ECONOMIES**. Internal Economies are those which are inherent in the nature of the production process and those sponsoring it. These include superior technical processes and labour saving devices resulting in greater productivity, a better mix of the various factors of production, and the efficiency of the entrepreneur in matters relating to management and marketing. External Economies are those which are shared with other firms in the same industrial group or with other industries in the same area. External Economies include cheap and efficient transportation and communications, availability of credit and banking facilities, the presence of labour with the required skills, and repair and maintenance facilities. There are limits to which the internal and external economies available to a firm can be stretched. The point upto which the firm can fetch these economies will be the point upto which it will enjoy increasing returns or decreasing cost. With their exhaustion the stage will be set for constant returns, and thereafter decreasing returns and increasing costs.

### Efficiency of Labour

**LABOUR** is an active factor of production. The efficiency of labour or the productivity of labour is an important determinant of the quantity and quality of production. By efficiency



of productivity of labour is meant the contribution of labour in the productive process or in the end-product. If one unit of labour can produce more of the end-product or a better quality of the end-product, it is said to be more efficient or its productivity is said to have been increased.

The efficiency of labour depends on the following factors:—

i) **PHYSICAL, MENTAL and MORAL QUALITIES:** Some people are better endowed than others with physical, mental and moral qualities. Their health is better and they can work much harder than other people without getting tired. Their general intelligence is of a higher order and they can be taught things much faster than others. Finally, the moral attributes of integrity, diligence and loyalty are more pronounced in some people than others and they have a positive effect on the efficiency of labour.

ii) **LEVEL OF EDUCATION:** An educated labourer is more efficient than an illiterate one. Technical education further enhances the efficiency of labour.

iii) **CONDITIONS OF WORK:** A cheerful atmosphere increases the efficiency of labour while drabness in working conditions reduces efficiency. Prospects of promotion and sympathetic attitude of the employer also improve efficiency.

iv) **LEVEL OF WAGES AND WAGE-SPENDING HABITS:** Generally speaking the higher the level of wages, the greater the efficiency of labour. Higher wages mean better food, clothing, housing, health, education and leisure facilities. If the wage-spending habits of the people are irrational and a substantial part of wages is spent on gambling, smoking and alcohol efficiency of labour would be adversely affected.

v) **QUALITY OF MACHINERY AND RAW MATERIAL EMPLOYED:** The quality of machinery and industrial raw material employed in the production process has a direct effect on the productivity of labour. The use of new machinery increases the efficiency of labour, while the use of old and obsolete machinery has an adverse effect. The use of good quality raw material increases the end value of the product and enhances the productivity of labour.

vi) **DIVISION OF LABOUR AND ITS ORGANISATION:** Division of labour in a scientific and rational manner has a pronounced positive effect on the efficiency of labour. Efficiency in organisation also increases productivity. Putting the right man in the right job should be the basic aim of every organiser.

## **Mobility of Labour**

**MOBILITY OF LABOUR** implies the capacity of a person to move from one place to another, from one grade of work to another, and from one employment to another. These are known as **GEOGRAPHICAL, VERTICAL and HORIZONTAL MOBILITY**. If a clerk, working in an office in Karachi, secures employment as a clerk in another office in Karachi, it is an example of Horizontal Mobility. If this very clerk, after acquiring sufficient experience of the working of his old office, were to get a higher position in his old office or any other office in Karachi, it would be a case of Vertical Mobility. Vertical Mobility and Horizontal Mobility can also involve Geographical Mobility. This would have happened if the clerk, in our example, got a higher job or the same job at Islamabad. Thus the degree of the Mobility of Labour depends on the ease or otherwise with which they can change from one use to another or from one place to another. The extreme cases are perfect Mobility and Immobility, in which case no change is possible.

The more serious restrictions on movement or Mobility of Labour arise out of the social structure, or are deliberately imposed. Apart from inertia, that is, resistance to change, movement is expensive. Familiar sights and surroundings have to be left behind for unknown pastures. Known people have to be left behind and new friends cultivated in new neighbourhoods. The prospects of having to live with new customs and fashions may further undermine the Mobility of Labour. The prospects of having to learn a new language is a deterrent to the Mobility of Labour. Furthermore, political obstacles may also hinder movement from one place to another and from one country to another.

The **advantages** of **MOBILITY OF LABOUR** are as follows:—

- i) It increases production by increasing the efficiency of the economic system. There is a continuous flow of labour from low income economic activity to high income economic activity and from regions where wages are low to regions where wages are higher.
- ii) It reduces the level of unemployment because labour can freely move from depressed areas of unemployment to the more prosperous areas where there is a demand for labourers.
- iii) It rewards workers with appreciation of merit. If there is vertical mobility of labour, good and proficient workers can always look forward to a higher grade in the unit where they work or in other units.

## **Division of Labour**

**DIVISION OF LABOUR** is an aspect of specialisation through which human activity increasingly diversified and specialised. The principle of Division of Labour was first stated by Adam Smith in 1776. Adam Smith observed that the division of labour is the principal factor in increasing the productivity of labour. In primitive societies there was no division of labour and everybody produced for their own needs. As civilization progressed man began to learn and adopted a particular occupation. The intensification of Division of Labour is a part of the process of economic development. In fact the extent of division of labour in a country is good index of the state of its economic development.

The Division of Labour proceeds from the division of the economy into distinct industries. Individual industries are then divided into processes, and then the processes are divided into small part-processes. Division of Labour is thus a process of increasing specialization and is applicable to all forms of economic activity. The specialization of an area is also included in the division of labour because workers in a particular geographical area concentrate on a specific form of production. This aspect of Division of Labour is also called **LOCALISATION OF INDUSTRY**.

The **advantages** of **DIVISION OF LABOUR** are as follows:—

- i) It increases production.
- ii) It saves time in learning a skill and saves time in not having to learn more than one skill.
- iii) Specialization in a single job increases skill.
- iv) If a person concentrates on one job there is an increased scope for invention.
- v) The quality of production should improve.
- vi) Equipment and machinery is used to the maximum extent since it is not lying idle when the workers are engaged in other tasks.
- vii) Physical strain is reduced.
- viii) A pool of skilled labour is created and this could accelerate the further development of the area.

The main **disadvantages** of the **DIVISION OF LABOUR** are as follows:—

- i) Work becomes monotonous.
- ii) Repetition blunts the intelligence and sometimes robs the human personality of its artistic sense.
- iii) The nervous and physical strain is high if the pace of work is set by a machine or by other more efficient workers.
- iv) Inventiveness is checked if the job is much too limited in scope.
- v) Mobility of labour is checked if specialisation increases and the possibility of unemployment is greater.
- vi) Division of labour may well cause a loss of sensibility.

- vii) A number of hardships are involved in living in over-crowded urban areas.
- viii) There is loss of personal relationship between employer and employee.
- ix) The organisation of work becomes increasingly difficult.

The extent to which Division of Labour can proceed is limited, as Adam Smith stated, by the extent of the MARKET. Obviously Production should not exceed Demand; thus the extent of demand or the extent of the market is the major limiting factor on the extent of the Division of Labour. Division of Labour is also restricted if diminishing returns set in at an early stage of the production process. In other words, Division of Labour can not go beyond a point where production can only be increased at an uneconomic cost.



## Stages in Evolution of Economic Life

Since the days of Adam and Eve Man has evolved from a primitive creature involved in an animal kind of existence, solely relying on his physical and mental powers into a sophisticated and complex being with unlimited wants and increasing dependence on other fellow human-beings living thousands of miles away.

We can, by and large, distinguish six stages of economic evolution or development. These are:—

- i) Hunting and Fishing Stage,
- ii) Pastoral,
- iii) Agricultural,
- iv) Commercial,
- v) Industrial (also called The Machine Age), and
- vi) The Take-off Stage.

### Hunting and Fishing

In the earlier years of human civilization Man lived a wild and savage existence feeding off wild roots and fruits. After some centuries he learnt the art of hunting wild animals and catching fish. Wooden sticks, bones of animals, teeth and pieces of stone were his main weapons. Later, he forged short knives, hammers and arrows from his discovery of fire and metals. He did not have a home even in the form of a hut and he had to content himself with the shelter provided by trees and caves. Thirst was quenched with water from streams or lakes. The skins of animals or the leaves of trees provided the wearing apparel. Man's wants were very simple and few indeed and these were satisfied directly without any cooperative effort. A struggle for survival between individuals was not unknown even in this the first stage of economic development.

### Pastoral

In the pastoral stage, the second stage of economic evolution, man tried to lead a more stable existence by learning how to domesticate animals rather than just hunt them. Animals were now tamed and their breeding was largely for meat, milk and skins. Milk and meat provided food, skins provided the apparel and the animals themselves were sometimes used for transport purposes. Man now began to live in a larger group of fellow-men and moved from one place to another in search of grassland for pasture. A faint beginning was made in the direction of obtaining division of labour. The owners of farms who could not participate directly in the rearing and hunting of animals made tools or weapons and were, in turn, given food on a barter basis. Division of labour also brought about exchange of goods. The ownership of animals introduced the concept of private property and its inheritance from father to son. Wars between various tribes for the possession of attractive pastoral land led to the defeated tribe being made slaves, and these slaves had to work for their victors and tend their master's animals. In the pastoral stage we find a relatively more stable existence, the taming of animals, property in cattle, transfer by inheritance, a crude division of labour, barter, and slavery.

## **Agricultural**

The domestication of wild plants was a logical sequence to taming wild animals in the pastoral stage. The pastoral stage thus led to the agricultural stage. Man now learnt to cultivate land and to support a large population on a fixed area. Agricultural implements like ploughs came into vogue. There was increasing variety in the products which could be grown from the land. Small dwelling places were built for the security of the fields and thus villages sprang up. Private property now also included land, in addition to animals. The extent of division of labour developed even further with some men working in the fields, others tending to animals and yet others providing security for the area, and women looking after the hearth and home in addition to giving a helping hand in livestock management. There was a further professional division of labour with the advent of trades like weavers, blacksmiths, shoemakers and potters. This in turn led to an increased exchange of goods and services and the barter system received a further impetus. Water now constituted a major resource and population centres grew up where it was available. The struggle between various groups of men, or tribes as they were called, became more acute with the desire to obtain the better agricultural settlements. The main features of the agricultural stage of economic evolution were self-sufficiency of the village, division of labour within the family and also professionally, greater reliance on other members of the community, development of water resources, private property in land and animals, and the production of wealth.

## **Commercial**

The Commercial stage of economic development was an evolution from the agricultural stage in which ploughs and agricultural implements were necessary capital. This equipment was made by craftsmen in their own houses and with their own tools and raw materials; they sold the goods themselves and there was no middle man between the producer and the consumer. Different houses made different types of equipment and all this production was in one way or another linked with agriculture. These handicrafts developed side by side with farming. The exchanges led to the growth of bigger markets which, in turn, accelerated the growth of industry and the domestic system. The growth of industry created commercial middlemen (or traders) between the producers and the consumers. These traders sold the products of the handicraftsmen and canvassed their sale amongst the farmers. They sometime supplied capital and raw materials to the handicraftsmen. Thus, we see a greater emphasis on division of labour and increasing reliance amongst members of the community in one form or another.

At this stage money was introduced in metallic form so as to ease the problem of exchange and to obviate the defects of the barter system. The development of industry and the domestic system led to specialization of production of a particular item in a particular area, thus benefiting further from the skills of production as well as a better division of labour. The Commercial stage of economic development was characterised by a greater production of wealth, extension of markets, emergence of towns, a better division of labour, development of exchange and the use of various forms of money.

## **Industrial Stage or Machine Age**

The Industrial stage or Machine Age began with industrial development in the United Kingdom between 1760 and 1850. The invention of the steam engine, the spinning jenny and several other technological innovations marked the beginning of the Industrial stage which received a further impetus after the discovery of electricity which gave new life to the machines. The speed of the machines supported production on a large scale and made means of transportation and communication much faster. New countries were discovered and with these new markets, to be exploited by the more powerful and the more enterprising nations. Thus international trade was developed and this in turn, created the complex problems of foreign exchange.

The old individual or family holdings were increasingly replaced by joint-stock companies in which there were a very large number of shareholders and there was little personal touch between the management and the workers. The limited liability company helped to mobilise the capital needed for the establishment of larger industries.

Society now tended to be divided into two hostile groups, namely, management and labour. Trade unions were organised by the workers for their security and Government started taking an active role in the planning and management of the country's economy. There was a tremendous increase in production, particularly industrial production. Non-food crops like cotton, acquired new importance in agriculture as raw materials required to feed the giant appetites of industrial processing machines. Rapid urbanisation created both social as well as economic problems, and slums became the general rule rather than the exception in the larger cities. The relationship between Man and Man became more impersonalised and sentiment and emotion were replaced or rapidly overtaken by material considerations. The increased production and the increased availability of wealth, which could have been a boon to mankind, ultimately came out as a mixed blessing, with a large number of people craving for the good old days of mental peace and tranquillity. Social and moral values failed to keep pace with economic growth and this is probably the most serious criticism of the Machine age of economic growth.

The main features of this stage were mass production of goods, the factory system, increase in international trade, growing problems of foreign exchange, some form of planning, increased division of labour, use of both extensive and intensive methods of industrial and agricultural production, quick transport and communications, improvement in material prosperity, increase in the urban population, and a decline in social and moral values.

### **Take-Off Stage**

Since the mid-fifties it has become fashionable to talk of the Take-off Stage. This stage is supposedly reached after a Take-off period of 20 to 30 years during which the economy develops in such a way that economic growth subsequently takes place more or less automatically. Professor Rostow is credited with this concept and Take-off is defined as follows:

"Take-off is the interval during which the rate of investment increases in such a way that real output per capita rises and this initial increase carries with it radical changes in the techniques of production and the disposition of income flows which perpetuate the new scale of investment and perpetuate thereby the rising trend in per capita output. The term 'Take-off' implies three things: Firstly, the proportion of investment to national income must rise to 12 to 15%, definitely outstripping the likely population increase; secondly, the period must be relatively short so that it should bear the characteristics of an economic revolution; and, thirdly, it must culminate in self-sustaining and self-generating economic growth."

### **Stage of Economic Development in Pakistan**

Pakistan is a fascinating country, which thrives as a nation whose various parts are characterised by endless variety and diversity. It would be safe to say that there is no place in Pakistan which still exists in the Hunting and Fishing stage. Yet quite a few people still lead a pastoral existence and the agricultural stage is predominant in Pakistan. We have made magnificent advances towards the evolution of the Industrial or Machine Age. The jet services of Pakistan International Airlines have won international acceptance. Yet camel carts and donkey carts move alongside shining new automobiles on the streets of Karachi. We have an efficient transport and communication system, both road and rail and yet a large part of our agricultural produce is still carried in bullock carts and on camel-back. We have a reasonably good educational system yet there is no shortage of illiterate people or half-baked graduates. The handloom is still in use on a large scale, although our textile industry is one of the most efficient in the world. We have very large private traders and industrialists, but at the same time we also have the "chai hotels" serving the wayfarer as well as the cluster of as small as six dwellings.

It was visualized that West Pakistan, or what is Pakistan today, would reach the Take-off Stage in 1975. The tragic events after 1970 and the socio-economic disturbances (both national and international) accompanied by unforeseen national calamities reduced the rate of economic growth to be almost 'zero' between 1970 and 1975. In 1975-76 almost 95 per cent of our develop-





# Characteristics of Under-Developed Countries

## The Challenge of Poverty

**DEFINITION:** According to the United Nations, an under-developed (or developing) country is one in which the per capita real income is low when compared with the per capita real income of the USA, Canada, Australia and Western Europe. Under-developed countries are generally those which, compared with the advanced countries, are under-equipped with capital in relation to their population and natural resources. Professor Ragnar is of the view that economic development has much to do with human endowments, social attitudes, political conditions and historical accidents. Capital is a necessary but not a substantial condition of progress. Generally speaking, countries with an annual per capita income of less than \$600 are regarded as under-developed countries.

**CHARACTERISTICS:** There is a substantial diversity amongst various under-developed countries yet they do share some fundamental characteristics. The most common characteristics are:—

(i) **Economic backwardness and low per capita income**

The people in under-developed countries are low quality productive agents. These people have struck a balance with nature at an elementary level without attempting to master their material environment. Their per capita income or national income per head of population is a small fraction of that of the developed countries. The provision of social services in the form of housing, sanitation, health and educational facilities is inadequate and of poor quality.

(ii) **Under-utilization of national resources**

Generally speaking, the national resources in under-developed countries are either under-utilized or not utilized at all. In some instances there is a wasteful utilisation of a national resource.

(iii) **High rate of population growth**

South Asia and East Asia are glaring examples of an undesirable increase in population growth. It is ironical that those least able to afford them bear children at a much higher rate than the privileged groups.

(iv) **Extent of unemployment**

There is substantial unemployment and under-employment in the under-developed countries. Under-employment or disguised unemployment exists since there are more persons engaged in a particular economic activity, such as agriculture, than are actually needed. The decline in the death rate without any comparable decline in the birth rate poses a serious population problem.

(v) **Predominant Agricultural Sector**

In the developing countries the economy is predominantly agricultural and 60 to 90 per cent of the population is employed on this sector. Agriculture contributes almost 40 to 70 per cent of the Gross National Product (GNP). Labour productivity is low resulting in a low output per acre. The rural economy relies heavily on traditional techniques and it takes a great deal of persuasion to introduce better inputs, such as synthetic fertilizers, better seeds, insecticides and pesticides, and a better application of water resources.

The developed countries are characterised by a small agricultural sector which

relies on mechanical farming techniques, crop rotation, fertilizers and pesticides, and extensive market and research facilities. The result is a high production per acre. For instance, in the USA only 6 per cent of the population feeds the whole country as well as provides millions of tons to other parts of our hungry world.

vi) **Limited Industrial base**

Under-developed countries have a small industrial base as compared to the developed countries. Their industrial products are also of a much simpler nature as compared to the sophisticated products of the developed world. While under-developed countries largely concentrate on processing industries, particularly food and textile goods, the developed countries are moving with great speed in highly sophisticated items, such as computers.

vii) **Insufficiency of capital equipment**

The under-developed countries are a CAPITAL-POOR economy, where not only is the stock of capital rather low but the rate of capital formation is also very low. Savings are low and most of the income is spent on consumption, including some conspicuous consumption by the upper classes. Industrial profits are a small part of the national income and therefore do not play a more prominent role in industrial growth. Yet it must be said to the credit to some under-developed countries that their upper classes re-invest a very large percentage of their profits in new ventures or expansion of existing ones.

viii) **Foreign Trade Orientation**

Under-developed countries are mostly foreign trade oriented, and by and large export raw materials and import consumer goods, industrial raw materials and machinery. Exports account for a substantial proportion of the GNP, and this, in turn, subjects them to the vagaries of adverse international movements in the demand for and prices of their goods. It has been observed that times of international recession are characterised by a fall in the prices of raw materials and an inflationary upward trend in the prices of manufactured goods, particularly plant and equipment.

ix) **Chronic shortage of foreign Exchange**

Under-developed countries generally suffer from chronic problems of foreign exchange, once they embark on the development process. The demand for imported industrial raw materials and spare parts shoots up, as does the import demand for plant and equipment. There is also a pressure for the import of durable consumer goods, such as motor cars, radios, television sets, and refrigerators. This problem has been compounded on account of a five-fold increase in the price of oil and a two to three-fold increase in the price of industrial raw material and machinery, during a small period of two years between 1973 and 1975. All this happened when prices of the raw material exported by the under-developed countries remained stagnant, or, in some cases, even declined. The terms of trade have moved heavily against the under-developed countries which are not producers of petroleum, thus making them relatively poorer. The balance of payments deficit has been mostly met by loans from international institutions, the developed countries, and petroleum exporting countries; yet these loans constitute a mortgage on the future of their economies and have to be repaid.

x) **Excessive dependence on Indirect Taxation**

In under-developed countries governmental revenues are mostly derived from customs duties, excise duties and sales taxes. The share of direct taxes, such as those on income and capital are relatively low. Hence the absence of a markedly progressive element in the taxation structure of under-developed countries.

xi) **Insufficient means of Transport and Communications**

Under-developed countries are characterised by insufficient and poor means of transport and communications, such as railway facilities, road transport, efficient

ports, and adequate postal and tele-communication facilities.

**xii) Attitudes**

In an under-developed country there is a fatalistic attitude to life and an absence of pride of performance, which adversely affects both the desire to work as well as the ability to work. The extended family system provides the kind of insurance which is supplied by social security in the developed world. Professor Galbraith has observed that a poor agricultural country is likely to be unprogressive even in its agriculture, and Professor Gunnar Myrdal has explained this paradox by emphasising that while industrialisation creates technology which can be applied to agriculture, the reverse is not true. Under-developed countries abound with instances of 18th Century thinking combined with half-digested fragments of 20th Century political theories.

## **Means to Overcome Poverty.**

An under-developed country must free itself of its malaise and move towards a more fulfilling way of life. With the advent of independence in the under-developed countries there was a surge in the revolution of rising expectations. The people expected that political freedom would perforce be accompanied by an improvement in their economic and social lot. No Government which failed to satisfy this urge of the people for a better way of life could hope to survive. The process of economic development aimed to attack poverty, hunger, disease, squalor and ignorance had to be channelled by a concerted drive on several economic and social fronts. The measures designed to accelerate economic growth can be divided into the following groups:

**i) Development of Natural Resources**

Development of natural resources includes the development of land, power, mineral resources, forests, fisheries and animal wealth.

**ii) Human Resources**

The development of human resources is a must if the country is to move forward. The efficiency and productivity of the labour force has to be increased. Education, particularly technical education, has to be made into a powerful tool of economic progress. A hard-working intelligent, knowledgeable population is a most powerful vehicle for growth.

**iii) Capital formation**

Capital formation can be induced by national savings or by utilising the savings of other countries in the form of foreign aid. The use of capital formation for the production of agricultural products, consumer goods, industrial raw material, spare parts and capital goods cannot be over-emphasised, if the rate of growth is to be speeded-up. Capital growth is a vital factor in promoting speedy economic growth.

**iv) Use of Science and Technology**

Science and Technology can be successfully harnessed to supplement natural resources and to speed up developmental efforts. The green revolution in agriculture is a result of scientific progress as is the introduction of nuclear energy in countries which are deficient in other energy sources. Science and Technology are potent factors in improving our economic and social conditions. They can also be a means of mass destruction, if used for military purposes. The growth of science and technology in the country is generally indicative of the progress it has made in economic development.

**v) Provision of Social Services**

The provision of adequate social services in the form of health and education facilities, low cost housing and social insurance is necessary if we are to build up our human resources. In fact the creation of a Welfare State with firm guarantees for the pro-

vision of social services is the aim of a large part of our world.

vi) **Problem of Inequality**

Some eminent persons like Karl Marx and Professor Gunnar Myrdal have maintained that the inequality of income hampers economic growth.

Karl Marx's theory of scientific socialism seeks to explain every event of history on economic grounds. This approach cannot be accepted as "Man does not live by bread alone." The influence of religious and emotional factors on human beings cannot be discounted. Karl Marx, in his Theory of Surplus Value, states that the excess which a manufacturer gets over the amount spent on labour represents a surplus value and that this surplus value is the creation of labour. Karl Marx emphasises that the appropriation of the surplus values by the capitalist is robbery and exploitation and is created on account of labour being paid much less than its due. The approach of Karl Marx is not valid because he has not taken into account the important contribution of Capital and Organization in the production process.

Professor Gunnar Myrdal in his recent book "The Challenge of World Poverty" make out a brilliant case for attacking the problem of inequality. He says:—

"The conclusion I have reached is that inequality and the trend towards rising inequality stand as a complex of inhibitions and obstacles to development and that consequently, there is an urgent need for reversing the trend and creating greater equality as a condition for speeding up development."

Professor Myrdal rebuts the contention that a conflict exists between the aims of growth and equality and that inequalities in income contribute to the growth of the economy, which makes possible a real improvement for the lower-income groups.

Gunnar Myrdal writes: "First, the usual argument that inequality of income is a condition for saving has much less bearing on conditions in under-developed countries, where landlords and other rich people are known to squander their incomes for conspicuous consumption and conspicuous investment, and sometimes particularly (but not only) in Latin America, in capital flight.

"Second, since large masses of people in under-developed countries suffer from undernutrition, malnutrition, and other serious defects in their levels of living, in particular lack of elementary health and educational facilities, extremely bad housing conditions and sanitation, and since this impairs their willingness and ability to work and to work intensively, this holds down production. This implies that measures to raise income levels for the masses of people would raise productivity.

"Third, social inequality is tied to economic inequality in a mutual relationship, each being both cause and effect of the other. Greater economic equality would undoubtedly tend to lead to greater social equality. As social inequality is quite generally detrimental to development, the conclusion must be that through this mechanism also greater equality would lead to higher productivity.

"Fourth, we cannot exclude from consideration that behind the quest for greater equality is the recognition of the fact that it has an independent value in terms of social justice, and that it would have wholesome effects for national integration."

It would be difficult to subscribe fully to Professor Myrdal's view. Nevertheless it is one that merits serious consideration. There is a constant struggle between "Egalitarianism and Efficiency." Although men are born equal, they are not necessarily created equal and they are characterised by varying degrees of physical and mental attributes, aptitudes and attitudes. The market mechanism should be allowed to operate as far as possible, because it ensures the sovereignty of the consumer as he alone decides what is to be produced, its quality and quantity. The Welfare Ethic should be fully taken into consideration but it should not lead to a situation in which the Welfare Ethic places in a secondary position the Work Ethic. The provision of adequate social services in the form of education, health, housing and sanitation will necessarily involve a

marked lessening in Inequality of Opportunity. Inequality of Opportunity is to be attacked with full force once the economy is broad-based and strong enough to bear this burden so that every individual is given the fullest opportunity to develop his natural talents uninhibited by an oppression economic and social framework.

In no case, however; should we lose sight of the Work Ethic emphasising the Efficiency and Productivity of labour, capital and organization. Progress should preserve the heritage of one value system which is necessary for Progress with Stability: respect for legal authority, adherence to the work ethic, maintenance of an equilibrium between material advancement and social and spiritual development, and last but not least, rendering 'unto Caesar the things that are Caesar's and unto God the things that are God's,'



# Population

## Malthusian Theory of Population

Thomes Robert Malthus (1766-1834) in his "Essay on the Principle of Population", published in 1798, drew attention to the increasing population of England encouraged by the Poor Laws. He feared that England was heading for a disaster because in his view, the growth of population would outstrip the availability of resources. He noted with regret "the strange contrast between over-care in breeding animals and carelessness in breeding men."

Malthus maintained that while population increased in a geometrical progression (2,4,8, 16....), production of food increased in an arithmetical progression (1,2,3,4,5,.....), namely, at a much lower rate. Malthus concluded that population tends to outstrip food supply and that unless preventive checks, like avoidance of marriage or less children per marriage, are exercised positive checks like war, pestilence, famine and disease will operate to restore the balance between population and food supply.

The Malthusian Theory has been criticised on the following grounds:—

- i) The pessimism of Malthus is now proved incorrect by the history of the developed countries, where population increased but it did not outstrip the means of subsistence. The people of the developed countries and the oil exporting countries are now enjoying a very high standard of living, which Malthus could never imagine.
- ii) Malthus did not take into account the vast improvement in technology and the innovations in science which would bring tremendous increase in every sphere of production, particularly food production.
- iii) Malthus laid too much emphasis on food production. He did not visualise that a time would come when food would not constitute the main item of human requirements.
- iv) Malthus did not visualise that improvement in living standards would tend to hold down the size of the family so that affluence could be maintained.

It must be emphasised that the Malthusian Theory is basically correct in spite of the criticism that has been levelled against it. Positive and preventive checks do keep population under control, and in the absence of these checks population would outstrip the means of subsistence. The widespread popularisation of family planning is proof of the truth of his theory. Population is increasing all over the world, but nevertheless the worst part of it is that it is increasing at the wrong ends. The poorer countries and the poorer people, who can indeed ill-afford to feed, clothe and educate children properly, are multiplying much faster than the more affluent people and the richer countries which are in a position to replenish perhaps a better quality stock. It goes to the credit of public-spirited men like John D. Rockefeller III for obtaining international recognition for the urgent need of family planning.

Population policy comprises measures aimed at closing the gap between the sum of actual births in a society and the number that would be socially desirable under some set of social objectives.

In most low income countries well over one-half, and quite often more than four-fifths, of the population live in rural areas. Over the past 25 years there have been increases in agricultural production due to expansion of cultivated and irrigated areas, improved technology, and greater use of modern inputs. In the same period, rural populations have also increased substantially, as industry has not been able to absorb the high rates of natural increase.

The following table illustrates the relative population problems of some Asian countries.

The figures relate to 1974 and are based on an April 1975 publication of the Asian Development Bank.

Name of Country	Area in square Kilometres	Population in millions	Density or persons per square Kilometre	Per cent of economically active population	Urban population as percentage of total population
Afghanistan	647,497	18.71	29	N.A.	7
Bangladesh	142,776	74.99	531	34.3	5
Burma	678,033	30.27	45	N.A.	19
India	3,280,483	586.06	179	32.9	20
Indonesia	1,904,569	129.12	68	33.9	17
Malaysia	332,648	11.65	35	33.3	29
Nepal	140,797	12.07	86	45.8	5
Pakistan	803,943	65.33	81	30.5	25
Philippines	300,000	41.46	138	33.6	34
Sri Lanka	65,610	13.49	205	29.3	20
Singapore	581	2.22	3700	33.2	60
Thailand	514,000	41.02	80	48.1	15

1 square Kilometre = 0.386101 square mile.

A group of cosmic thinkers called the Club of Rome raised the question whether human civilization is in danger of growing itself to death in 1972 and sparked a violent controversy with the publication of its conclusions based on an elaborate computer model developed at the Massachusetts Institute of Technology.

"The Limits to Growth" warned that if current trends in population and natural-resource depletion remained unchecked, the earth faced an imminent Malthusian catastrophe: a world of mines and wells run dry, of industry ground to a halt, and a famine of power. The debate has become acrimonious with periodic meetings of growth and no-growth partisans to argue their cases. The debate has focussed almost exclusively on the growth issue; would technology provide a timely bail-out, especially if the world were depleting its resources and adding to its population at exponential rates? There was only one answer: it depends on the optimistic belief that growth is good for us.

Herman Kahn, Director of the Hudson Institute, concedes that economic growth will slow down eventually but he maintains that a no-growth policy would only "consign the poor to indefinite poverty. The real problem in today's world is not growth but the maldistribution of income between rich and poor nations." One persistent criticism of "The Limits to Growth" has been that the study tended to ignore how income is distributed.

### Optimum Theory of Population

Optimum population means the ideal number of people that a country should have considering its resources. The optimum number means the right number, no more and no less. With a given amount of resources, including capital, and a given state of technology, there will be a definite size of population at which real income in terms of goods and services per head of the population will be the highest. This is the optimum also of the population, and the optimum number can, therefore, be defined as the one in which per capita income is the highest. Above the optimum number, the country is over-populated, and below this number the country is under-populated.

The Optimum Theory of Population takes into account economic development as a whole as against the emphasis of Malthus on food production alone. The Optimum Theory of Population is more dynamic since the Malthusian Theory does not take into account the changing availability of resources and techniques. The symptoms of over-population are such that it



is not difficult to diagnose. Squalor, disease, ignorance, high birth rate, high death rate, particularly infant mortality, poverty, unemployment and under-employment are fairly good indicators of the state of over-population.

## Measurement of Net Reproduction Rates

In every day language, the excess of births over deaths represents the net increase in population. Normally the birth rate and death rate are measured in terms of thousands, and the difference per thousand is said to be the increase in the rate of population growth. The net reproduction rate is a more defined measure of population growth. According to Kuczynski, the rate at which the female population is replacing itself is the net reproduction rate. Under the Kuczynski formula, the pertinent question is how many out of the 1,000 newly-born girls reach child-bearing age (15 years); how many reach 16 years, etc., and finally how many pass through the child-bearing age upto 50 years. We have really to find out how many females are born of the original stock of 1,000 girls. If more than 1,000 girls of child-bearing age survive every 1,000 girls born, then the population is increasing; otherwise the population is decreasing.

## Family Planning in Pakistan

The problem of population in Pakistan in relation to available resources is so acute and pressing that it has been dealt with in some detail. The author is indebted to Mr. Enver Adil, who was Secretary to the Government of Pakistan, Family Planning Division, in the second part of the sixties for permission to quote extensively from a paper prepared by him on the subject. When President Ayub Khan selected him to head the Family Planning organization he had already built up a reputation for administrative efficiency as Rehabilitation and Settlement Commissioner, Commissioner of Quetta, and Education and Home Secretary of the Government of West Pakistan. While in the Family Planning Organisation he was sent by the Government of Pakistan to Geneva with Pakistan's legal luminary, the late Mr. Manzur Qadir, to present Pakistan's case before the International Tribunal adjudicating the Rann of Kutch dispute between India and Pakistan. He has since distinguished himself in the legal profession,

The area comprising Pakistan is 307,374 sq. miles giving it a density of 228 persons per sq. mile. According to the 1972 Census, the population of Pakistan was 64.9 million (34.4 million males and 30.5 million females). This was an increase of 18.8 million over the figure of 46.1 million in 1961, that is an increase of 40 per cent over a period of 11 years. The distribution of Pakistan's population in 1972 was as follows:—

	Area	Population	
North West Frontier Province	28,773 sq. miles	8.40 million	12.95 per cent
Centrally Administered Areas	10,510 "	2.51 "	3.86 " "
Islamabad (Federal Capital territory)	350 "	0.235 "	0.36 " "
Punjab	79,284 "	37.37 "	57.59 " "
Sind	54,407 "	13.97 "	21.52 " "
Baluchistan	134,050 "	2.41 "	3.72 " "

*Source:* Pakistan Economic Survey 1974-75.

Since the turn of the present century, the areas constituting Pakistan have been experiencing an increasing rate of population growth. The population enumerated in 1901 was 16.576 million, 33.74 million in 1951 and 42.88 in 1961. Thus over the first half of the century (1901-51), the population increased by some 26 million or 5.2 million per decade, for an annual rate rising to just over 1 per cent per annum. During the next two decades (1951-72) the increase has been about 22 million or 11 million per decade, for an annual rate of 3.6 per cent per annum. This multiplication of numbers is largely responsible for keeping the per capita income low, unemployment and under-employment high, and for creating the socio-economic problems which accompany disease, squalor and ignorance. In 1975 it is estimated that the annual rate of population

increase is 3 per cent and the total population about 70 million—a fourfold increase in 70 years. The population will double in 24 years at the current rate of growth, creating colossal shortages of food and social services, as well as a social upheaval occasioned by unemployment.

It was against this background that in 1964 the Government of Pakistan undertook the planning and implementation of a large but realistic **PROGRAMME OF FAMILY PLANNING** for 1965-70. The then President of Pakistan, Field Marshal Mohammad Ayub Khan, had at that time observed:

“If the birth rate goes on as before, which is happening now-a-days, the population is bound to grow by leaps and bounds. This is happening in actual fact all over the world and particularly in our country.

This rapid growth of population creates frightening prospects for those looking into the future. If our numbers go on multiplying at this rate, I have grave doubts whether all our efforts for the development of our country and the amelioration of the lot of our people, would have any meaning whatsoever. Our planning, our sacrifices and our hard work for the progress of the country would be neutralized by the rapid growth of population.

If nothing is done to check the rate of growth, I shudder to think of what will happen after a few decades. My only consolation is that I shall not be there to face that situation. But my country and my people would be faced with it. And the coming generations would not forgive us for landing them in such a bad mess.”

It was indeed an administrative task of Herculean proportions to introduce and popularise Family Planning in Pakistan in the second part of the sixties. The powerful religious sentiments against such a programme had to be contended with. Equally difficult, if not more so, was overcoming the ingrained inhibitions and traditional attitudes of Pakistani families, particularly in the rural areas. The impact made by the programme during 1965-70 would appear from the following table:—

	Sterilisations		Total	I.U.D.		Total	Units of Conventional Contraceptives		
	E.P.	W.P.		E.P.	W.P.		E.P.	W.P.	Total
September '65 to June, 1966.	2,918	2,482	5,400	95,161	157,194	252,355	12,508,962	23,818,605	36,327,567
July 66 to June 1967.	32,185	16,544	48,729	250,470	337,880	588,350	34,250,617	62,903,077	97,153,694
July 67 to June 1968.	248,032	18,777	266,809	430,634	345,321	775,955	70,672,130	93,456,291	164,118,426
July 1968 to June 1969.	391,087	58,348	449,435	397,960	438,348	836,308	89,970,777	91,584,346	181,555,023
July 69 to June 1970.	317,642	10,293	327,739	278,671	342,952	621,623	70,860,704	102,715,466	172,576,170

Source: Pakistan Family Planning Division.

The administrative and organisational problems involved in planning and implementing the Family Planning Programme during the second half of the sixties have been extremely well summed up in the United Nations Evaluation Report. The U.N. team which was headed by Sir Ronald Walker and included leading international experts and political thinkers reported as follows:—

- “ i) *The President's Leadership*—In our contacts with people—including random encounters outside of avowed family planning circles—we have been impressed by the widespread acquaintance with the idea of family planning and knowledge of the existence and functions of clinics. This result is largely attributable to the efforts of Family Planning Programme, but it owes a great deal to the strong lead and backing of the President,

who makes frequent public references to the problem and to the Programme. This not only sets the tone of practically all official public attitudes on the subject but also reinforces the individual's interest in it as bearing not merely on the welfare of his own family but, in addition, on the prosperity of his nation. The situation is in marked contrast with that prevailing in many "more advanced" countries, where family planning is often not a matter of widespread public discussion, and may attract little or no overt support from the leaders of the nation.

- ii) *Sociological Break-through*—Apart from the establishment of the organization as a going concern, a major achievement of the programme has been in informing the population of the possibility of family planning and its importance in relation to food supply and national development, and in making the subject of family planning a matter for public discussion. To begin with, not only was knowledge about modern contraceptive techniques restricted to a very small minority of educated people, mainly in the cities, but the whole idea of family planning was unknown to most people, and when first broached, it was considered by many as being contrary to the Muslim religion. The situation has been radically transformed. Not only is the subject now freely and widely discussed in the press (even in terms of alternative techniques of birth control) but a large section of the illiterate ignorant rural population is now at least familiar with the notion and the possibility of preventing unwanted pregnancies, and of spacing births or restricting the size of one's family.

The initial obstacle to be overcome in Pakistan was a series of traditional taboos relating to sex. These sometimes extended even to the prohibition of conversations between husband and wife on the subject. The Pakistan Programme has done a remarkable job in a short time in making family planning an acceptable subject, not only in the case of husbands and wives but also in group meetings and in public gatherings, fairs and celebrations.

- iii) *Impact on Rural Area*—Interestingly enough, attitudes were found generally to be more favourable to family planning in rural areas than in urban. Knowledge about sources of supply and acquaintance with family planning personnel were also found to be better in the rural areas.
- iv) *Opposition to Family Planning*—When the opposition started, in the form of pamphlets and speeches in the Friday prayer services, rather than hampering the programme they appear to have created greater interest in family planning among the common people.

The Pakistan Government, moreover, sought the support of enlightened Muslim theologians in Pakistan and other Muslim countries who declared themselves in favour of Family Planning.

Books and pamphlets, moreover, have been issued with all the questions and answers on this subject, which are being made available to family planning workers.

- v) *The Programme*—The Family Planning Programme in Pakistan is at once an extensive administrative programme, a multi-disciplinary technical programme, and an educational movement aimed at producing social change.
- vi) *Planning*—The planning of an administrative structure that utilizes the full time or part-time services of 40,000 persons, ranging from highly skilled specialists to illiterate workers, and the implementation of that Plan in the short space of two and one half years should be a source of great pride to the Government and citizens of Pakistan. It is an achievement based on sound administrative skills and knowledge, drawing widely from the experience gained in earlier programmes (governmental and private) and related research projects.
- vii) *Administration*—The establishment of the Family Planning Programme, the development of its actual organization, staffing and procedures, in the short interval since mid-1965, is a remarkable administrative achievement, of which any country might be

proud. The special problems imposed by conditions in Pakistan (such as the size of the country and its division into two widely separated provinces, the transport and communications difficulties, the restricted level of literacy, the shortage of trained personnel, and the dislocation caused in the initial stages by hostilities with India) render the administrative achievement all the more praiseworthy.

This is the result not only of energetic and courageous administration, but also of imaginative planning, based on an intensive knowledge of the resources of the personnel and organisation available through the country, right down to the village level.

- viii) *Decentralisation and Flexibility*—The central administrative unit directs and guides the provincial and district offices under a general policy of decentralised control with allowance for flexibility in meeting local conditions. Instances were observed in the field where this policy brought very favourable results.

It is also noted that the organisation is both flexible and adaptable. Sufficient freedom of initiative and adaptation is conferred on the Provincial and District Boards to permit variations in the Scheme to take account of local conditions. When weaknesses have been exposed (e.g., in the professional performance of a small sample of Lady Family Planning Visitors) measures have been taken with a view to correcting such weaknesses (e.g., by prescribing additional training). This is of great importance, for we believe that further adjustments will need to be made to improve the effectiveness of the programme, to meet changing conditions and to take advantages of new techniques of birth control as they become available.

- (ix) *Training*—The administrators of the Family Planning Programme have been sensitive to justified criticisms of the programme and have sought to modify and change procedures when field studies indicated the need.

Indeed, in both wings, admirable attempts have been made to bring life and imagination to refresher courses given by mobile teams to the Family Planning Officers.

There is no doubt that tremendous effort and financial support have been put into the training of personnel. No one can fail to appreciate the labour of many professionals which has gone into both the development of the curricula and into the teaching of classes.

- x) *Supervision*—Quality of supervision is a major factor in maintaining the integrity of the Programme. Thus, the Team was strongly impressed by the intelligence and earnest concern for the family planning programme displayed by many of the District Deputy Commissioners. Similarly, District Publicity-cum-Executive Officers were encountered who were unusually able and energetic. The leadership of these officers is salutary in maintaining the high morale of the Family Planning Officers and other workers at the local level.
- xi) *Evaluation*—The Family Planning Programme is probably unique among Pakistani departments of Government in possessing a built-in system of evaluation, identified as such and independent of the organisation for executing the programme.
- xii) *Documentation and Financial Control*—The data collected and the forms used are generally very good, and there is no doubt that strict controls are needed to assure proper handling of funds, continuous flow of supplies and efficient use and maintenance of transport.

Financial records as prepared at the district level appear to be accurate and carefully checked.

- xiii) *Research*—In looking back over the research activities since the start of the first government programme in 1961, the Team is greatly impressed with the range and quality of achievement. This is, of course, an indication of sound administration which recognised from the start that research is an essential part of the total programme.
- xiv) *Supplies*—The fact that agents and dais and organisers carry supplies ensures that

not only city and town dwellers but also a major part of residents of the country's 100,000 villages can conveniently obtain conventional contraceptives. The schedule of mobile family planning clinics also brings periodic clinical services into most areas of the country, limited primarily by problems of access and suitable transportation for the clinicians. The procedures followed in purchasing supplies are generally good. With respect of concern over misuse of supplies, little solid evidence has been turned up to show that this is a serious problem.

- xv) *Reliability of Statistics*—More serious is the statement frequently heard that the monetary incentives paid to doctors, referral agents and (sometimes) clients is encouraging collusion and fraud. Such stories are difficult to check directly but the indirect evidence examined by the Team indicates that this not a major problem. The best protection against misreporting is effective supervision and a strong programme of follow-up on clinical contraception.
- xvi) *Monetary incentives*—The use of financial incentives for motivation is a pragmatic administrative approach. In Pakistan where poverty is commonplace it is unrealistic to expect a mass campaign to operate on a voluntary basis and it is impossible—in terms of close and effective use of manpower—to set up a single purpose full-time organization.
- xvii) *Conventional Contraceptives*—The Conventional Contraceptive Study in its preliminary findings notes that whereas nearly 34 per cent of IUD (Intra-Uterine Device) users are under 30 years old more than 53 per cent of the conventional contraceptive users fall in this age category.
- xviii) *Sterilization*—Sterilization appears to be the one contraceptive method that could arouse serious religious objections since it implies the permanent damaging of the natural function of procreation. The most remarkable development, therefore, is the widespread acceptance of sterilization in East Pakistan (now Bangladesh) which can only mean that when there is a basic need, objections, even those based on religious grounds, can be surprisingly easily overridden.
- xix) *IUDS*—The Government's programme has resulted in a vast number of IUDs being widely distributed throughout the country, including some of the poorest and most rural areas.
- xx) *Follow-up*—It is accepted that no easy solution exist for the shortage of lady doctors and that effective follow-up on a large scale cannot be achieved rapidly.
- xxi) *Inter-Departmental Cooperation*—At the Provincial level the membership in the Family Planning Board (under the Minister for Health) of the Chief Secretary and the Health Secretary, and at the district level of the District Deputy Commissioner (who chairs the District Family Planning Board) and of the Civil Surgeon or Chief Medical Officer ensures the active participation of the general and health administration; while the local administration is involved through the Union Council Secretaries for West Pakistan and the Thana in East Pakistan.
- xxii) *Cooperation of Health Services*—It is difficult for the health services, already understaffed, to establish and maintain a cooperative spirit toward an activity that calls for additional effort and time. Yet lady doctors and Lady Health Visitors, for example, often use their own time on Sundays, and other free time to travel to and work at part-time family planning clinics in rural areas. Variations can be noted in the quality and quantity of such cooperation, but in general it is cheerfully given.
- xxiii) *Family Planning Services in Rural Areas*—In the process a number of difficulties have been faced and largely overcome. Thus in many rural areas there were no pre-existing health facilities and it was necessary not only to gain the cooperation of qualified personnel to travel long distances in providing clinical services but also to furnish necessary equipment and arrange for buildings to house the part-time and mobile clinics. Similarly, there were problems of training the medical and para-medical personnel, developing standards of performance and arranging schedules for part-time and

mobile clinics, all involving the cooperation of the family planning organization and the health services. Not only have these been generally handled in a successful manner, but instances were observed in which the services supplied by the family planning personnel have been used by those who were adequately trained as a base from which to mount health services previously totally absent in particular areas.

- xxiv) *Giving other work to Family Planning Services*—Given the need to continue channelling major resources and efforts into motivational work, contraceptive supplies and the provision of mobile and part-time clinical services in large areas where health services are unavailable we believe that for some time to come an essentially single purpose organization is desirable.
- xxv) *Quality of Staff*—The Family Planning officers are probably the most enlightened cadre ever employed by the Government at the grass roots level. They are young university graduates (25 to 35 years of age) with the enthusiasm and zeal to take risks and face hazards and are drawn from the same cultural background as the people they serve.
- xxvi) *Publicity*—There was a large-scale effort to popularise family planning throughout the urban and rural areas visited. So too was the widespread awareness of the programme and knowledge of the services available. The continuous use of mass media coupled with frequent speeches by the President and prominent leaders appear to have created in a relatively short time a favourable social climate for family planning.
- xxvii) *Dais*—Without the dais (midwives) it would have been impossible to achieve the progress to date in IUD insertions, for it was through their efforts that an extensive group of early adopters was gained for the programme.
- xxviii) *Target Prospects*—The basic objective of the programme is to reduce the birth rate from its present estimated level of about 50 per thousand to 40 per thousand by 1980. This is an ambitious target and nothing comparable has been achieved in any large country with a mostly illiterate population. In our view, it is too early to predict with confidence that the target will be achieved. It cannot be too strongly stressed that even if the projected reduction in birth rate is not demonstrably achieved in full by the prescribed date, a firm foundation will have been laid for further progress towards the goal, provided the effort is maintained. Since the target is a high one, even partial fulfilment is a considerable achievement and lays a foundation for future progress.
- xxix) *Results*—The 1965-70 Scheme was a bold and imaginative response to the critical problem posed for Pakistan's future by rapid population growth. The results to date, though they can be measured only indirectly, indicate that the large investment in human and financial resources has been justified.
- xxx) *Integration of Family Planning with Health Services*—But we remain convinced that, particularly in the first few years of the family planning programme, the establishment of an independent organisation offered the only realistic approach to Pakistan's problem and we would not favour a premature attempt to bring about a fusion of the family planning organisation with the health services which we believe would only have disastrous consequences for both.
- xxxi) *Achievements*—At least three major achievements have resulted within the two and one half years that the new programme has been in operation: (i) a well-organised and effective administrative structure has been set up; (ii) knowledge of the purpose and methods of family planning is widespread and an acceptable subject for discussion; and (iii) systems for the provision of clinical services and contraceptive supplies function to make family planning practice possible throughout most of the country.
- xxxii) *Model Programme*—The Pakistan Programme is striving to gain general acceptance of family planning under conditions of high illiteracy, unfavourable levels of unemployment and under-employment and low per capita income in a predominantly agrarian

society. The broader importance of the Pakistan experiment should not be underestimated. No large country given these unfavourable factors in its state of development, has succeeded in reducing its fertility through a national family planning programme. This fact makes the achievements in Pakistan up to the present time all the more encouraging for the ultimate success of the Pakistan programme is crucial not only to this country but also to a large proportion of the world's population living in similar circumstances and faced with the same basic population problem.

**"WE ARE SATISFIED THAT IN THIS RESPECT, PAKISTAN'S EXPERIENCE HOLDS IMPORTANT LESSONS FOR OTHER DEVELOPING COUNTRIES INTENT ON REDUCING THEIR BIRTH RATE, BUT FACED BY OBSTACLES SIMILAR TO THOSE WITH WHICH PAKISTAN HAS TO CONTEND."**

During 1970-75 the Pakistan Family Planning Programme slipped downhill at a pace which was just as disappointing as the increase in the rate of population growth. I.U.D.'s which had touched 438,348 in 1968-69 and which were very near 350,000 in the preceding two years averaged around 100,000 per annum during 1970-75. Similarly, there was a very substantial decline in sterilisation cases as well as the use of conventional contraceptives. The oral pills which were sought to be popularised during 1970-75 are not a satisfactory method since they require to be taken regularly. It should be noted that the expenditure on family planning programme of the centre and West Pakistan was Rs. 137.3 million during 1965-70, as against that of Rs. 365.1 million during 1970-75 for a smaller implementation.

The Prime Minister of Pakistan, Mr. Zulfikar Ali Bhutto, is aware of the situation and in a press statement in February, 1975, expressed thorough dissatisfaction and disenchantment with the Population programme in Pakistan. The Prime Minister has issued firm instructions for re-invigorating and strengthening this Programme. In case the Family Planning programme does not succeed, it will lead to the inevitable clash between rising population and the narrowing food production potential.





# Monopoly

## Definition and Conditions of Monopoly

Monopoly is an extreme departure from Perfect Competition, since it assumes that there is only one seller of a commodity. A monopoly situation is one in which there is a unified control by a single firm or combination of firms over the supply of a good or service, and where this control can be maintained, at least over a reasonably long period of time. Under monopoly conditions there is only one firm as against many firms under perfect competition; under monopoly the firm produces a product which is unlike the product of any other firm, i.e., there are no close substitutes, while under perfect competition many firms produce an identical or homogeneous product; under monopoly it is not possible for new firms to enter the industry while under perfect competition there is no restriction on the entry or closing down of firms.

Monopoly, at least in theory, is a simple solution to the problems of production and supply. The monopolist has complete control over the total supply. The monopolist is, however, in no position to dictate demand. The law of demand is completely applicable to monopoly conditions; an increase in price decreases demand and a decrease in price increases demand. The extent to which demand will increase as a result of a decrease in price depends on the elasticity of demand for that product. In any case, if the monopolist wants to sell more, he can do so only at a reduced price.

We have observed that monopoly is the market situation in which a single group controls the entire supply for a single commodity which does not have a close substitute. There are two types of barriers which prevent the entry of new firms into this kind of industry: non-economic and economic.

Non-economic barriers consist of the institutional or other man-made barriers. These include exclusive ownership or control of the raw materials which are necessary for making a product, patents laws which prevent people from using a particular process of production or producing a particular end-product, and laws which prevent free entry into a particular industry or business.

The economic barriers which safeguard a monopolist are just as powerful as any institutional and legal barriers. A number of industries enjoy, what are called, **ECONOMIES OF LARGE-SCALE PRODUCTION**. It may well be that the market is not big enough to permit more than one firm to fully utilize the economies of large-scale production. There are quite a few industrial groups in which Decreasing Costs operate until a very advanced stage; in other words, production can be kept on being increased at a cost in which the cost of production per unit keeps on declining. In industries of this kind it would be reasonable to assume that the monopoly of a large firm, which is still enjoying economies of scale, cannot be broken by the introduction of a new firm. These kinds of monopolies are sometimes referred to as natural monopolies and they are mostly found in the case of transport and communications and the provision of utilities, such as water, gas, and electricity.

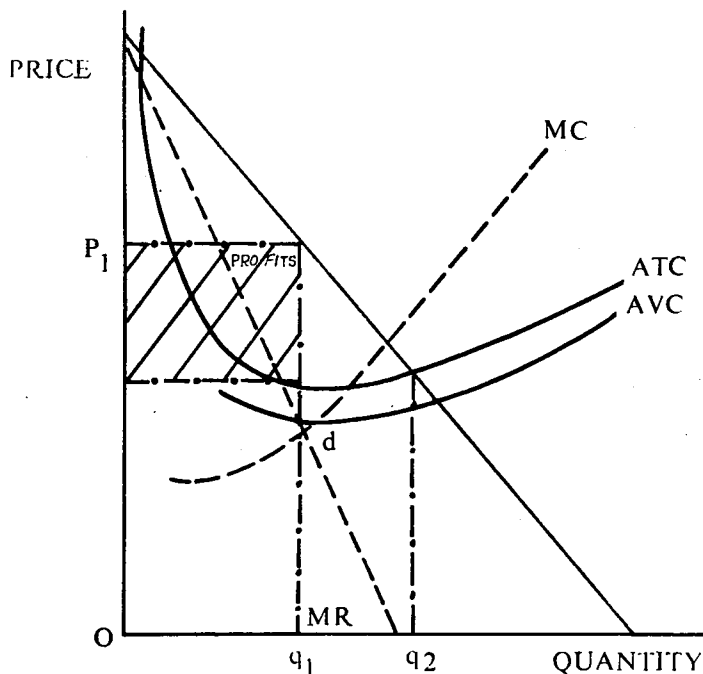
In Pakistan we do not have any cases of privately-owned monopolies, except one or two like RCD Ball Bearings Ltd. in which there is foreign participation. There are a large number of Government-owned monopolies which include railways; air transportation; posts; telegraph and telephones, generation, transmission and distribution of electric power; production, transmission and distribution of natural gas; provision of water for drinking purposes in urban areas; provision of educational facilities; distribution of fertilisers; life insurance; vegetable ghee, iron and steel, cement, automobile, and heavy engineering, electrical and chemical industries.

## Determination of Price under Monopoly Conditions

The aim of a monopolist is to maximise his profits. PROFITS ARE EQUAL TO THE DIFFERENCE BETWEEN TOTAL REVENUES (total sales) and TOTAL COST (fixed cost plus the variable cost needed to produce the output). The main concern of the monopolist is to maximise NET REVENUES or PROFITS. As long as MARGINAL REVENUE (the revenue derived from the sale of an additional unit of output) is greater than MARGINAL COST (the cost of producing an additional unit), it would pay the monopolist to keep on increasing production because in this way his profits will keep on increasing. Of course the monopolist will have to keep on decreasing his price if he wants to sell more, the extent of the decrease depending on the elasticity of demand for that commodity. Maximum profits will accrue at the point at which MARGINAL REVENUES equal MARGINAL COST. If the monopolist produces beyond this point, then to sell more he will have to reduce his price, and after this point marginal cost will exceed marginal revenue. The position of equilibrium of the monopolist is, therefore, the point at which marginal revenue is equal to marginal cost which is less than price, that is,

$$MR = MC < P$$

The point of equilibrium of a monopoly can be illustrated by the following diagram :



In this diagram MR is the marginal revenue curve (representing the increase in the total revenue from the sale of one additional unit); MC is the marginal cost curve (representing the increase in the total cost from the sale of one additional unit); AR is the average revenue or price curve which is in effect also the demand curve; ATC is the average total cost curve, that is, the actual cost per unit; AVC is the average variable cost curve, that is, the actual variable cost per unit.

This diagram indicates the importance of average total cost (ATC). If the ATC curve shifts upwards, that is, the average cost of the monopolist increases on account of an upward rise in the price of his inputs (i.e., the components of his average variable cost), his profits will shrink until he reaches the point at which  $ATC = AR$ ; if the ATC increases beyond this point, he will start losing money.

The diagram also clearly illustrates that the point of maximum profit (the point of equilibrium of the monopolist) is at an output of  $Q_1$ , at which point the Marginal Revenue and Marginal cost curves intersect; in other words where  $MR=MC$ . At this point the Average Revenue or Price is  $OP_1$  and the profits are indicated in the shaded area. It is possible for the monopolist to sell additional units, but he can do so only by reducing his total profits. In fact the monopolist can produce at a profit, although at a progressively lower amount of profit until he reaches a production of  $OQ_2$  (the point at which the Average Total Cost Curve and the Average Revenue or Price Curve meet); at this point  $ATC=AR$ . Beyond this point, the monopolist can only produce at a loss.

## Cartel

A cartel is a central selling organization of a number of firms which, while retaining their separate identity, join hands in pursuing a common policy for furthering their joint interests. The elements of the common policy are the fixing of prices, an agreed level of output by the member firms forming the cartel, and marketing arrangements, such as the division of home and export markets amongst themselves. A cartel, in fact, resembles a giant monopoly, with the difference that in most cartels marginal revenue is far in excess of marginal cost, thus giving the cartel much greater profitability at the expense of the consumer.

## Price Discrimination

A monopolist can charge different prices to different buyers or different prices in different markets. A monopolist sometimes also charges different prices for various quantities of the same commodity to any one buyer. For example, a high price can be charged if the buyer purchases a small quantity and a lower price if he buys a large quantity. This price discrimination is only possible if the markets are separated, and it is not possible for a buyer to take advantage of the lower price to outbid the monopolist at least for a small share of the market.

Price discrimination can be effective in two different markets if the elasticity of demand in the two markets is different; marginal revenues from the sale of the unit will be more where the elasticity is high as compared to the market where it is low. It would be more profitable to reduce the output and raise the price where the elasticity of demand is low, and increase the output and lower price where the elasticity of demand is high. In this way the marginal revenue in the two markets will be maximised. Mrs. Joan Robinson, the well-known economist, is of the view that price discrimination will increase rather than decrease output:

"It is possible to establish the fact that total output under discrimination will be greater or less than under simple monopoly according as the more elastic of the demand curves in the separate markets is less concave than the less elastic demand curve, and the total output will be the same if the demand curves are straight lines, or in any other case in which the concavities are equal."

Price discrimination can be beneficial to society, when the price of a particular service which is very useful to the community is fixed at different rates for different income groups or areas according to the doctrine of ability to pay. In this case the service can be provided to the poorer people at a loss to the enterprise which is made up from the profits resulting from selling the same service at a higher price to the more affluent classes.

The conclusion reached by Mrs. Joan Robinson in this regard appears to be a balanced one:—

"From the point of view of society as a whole it is impossible to say whether price discrimination is desirable or not. From one point of view, therefore, price discrimination must be held to be superior to simple monopoly in all those cases in which it leads to an increase of output, and these cases are likely to be the more common. But against this advantage must be set the fact that price discrimination leads to a maldistribution of resources as between different resources... before it is possible to say whether discrimination is desirable or not, it is necessary to weight

up the benefit from the increase in output against this disadvantage. In these cases in which discrimination will decrease output, it is undesirable on both counts."

## **Dumping**

Dumping describes the policy of price discrimination in international trade between two markets. Dumping is said to occur when producers in one country, who are generally monopolists, export their goods to another country at prices which are well below those charged from the consumers in their own country. Dumping generally takes place when the demand in the domestic market for that product is less elastic than in the foreign market. High prices may not restrict sales at home as much as they would outside the country; domestic buyers cannot turn to other sellers but buyers abroad need not limit their purchases from a particular country. The monopolist may also dump his products abroad to dispose off excess stocks which were produced due to an unwarranted optimistic appraisal of domestic demand. Other reasons for dumping are to promote new trade ties, drive out competitors from foreign markets, and to enjoy more fully the economies of large-scale production.

## **Advantages & Disadvantages of Monopoly**

Monopoly is by no means an unmixed evil. The tyranny of an efficient monopolist is far less than that of a dozen inefficient producers. A monopolist is by no means in a position to charge as high a price as he wishes. It is true that a monopolist controls his price in a way which is not possible under perfect conditions. A monopolist is, however, restricted in his ability to raise prices and to gain abnormal profits by the fact that he can increase his sales only if he reduces prices. The supply or sales curve is never perfectly inelastic. If this were not so, the monopolist could raise his price indefinitely. A high price does not necessarily mean a high profit because it pays the monopolist to increase his sale by reducing his price to the point at which marginal revenue is equal to marginal cost. It is, therefore, not correct to say that monopoly always involves exploitation of the consumer.

Another criticism of monopoly is that it leads to an undesirable allocation of resources, since the maximum welfare of society requires that the level of production should be increased to the point where marginal cost equals price. Under monopoly, price is always greater than marginal cost. It is profitable for the monopolist to restrict output to a level at which price is greater than marginal cost, and thus production is at a level lower than what would be required from the social welfare angle.

Monopolies are also criticised for making huge profits which lead to a greater inequality in the distribution of income and economic power.

A monopolist tends to retard the progress of science and innovation since he does not have the incentive to develop new processes and new products. This is so because he has no competition. This criticism is not borne out by the experience of some of the giant monopolies of the Western World and the Communist countries which have been the pioneers in the advancement of modern technology.

The economies of scale, which are one of the hallmarks of present day progress can, in a large number of cases, only be achieved through monopolies. The transport and communications sector and the public utility sectors are indeed difficult to operate except on a monopolistic pattern. This is also true of the large and heavy electrical and engineering and heavy chemical industries in the under-developed countries. The problems created by monopolies can be resolved by means other than creating inefficient competitors.

## **Restraint on Monopolies**

Almost all Governments in the non-communist world have taken measures to exercise restraints on monopolists. These Governments have taken a more broadbased view of the concept

of monopolies by including all those industries in which at least one-third of the supply process or export of goods are controlled by a firm or group of firms, or by restrictive agreements between firms which so arrange their affairs as to limit competition. Monopoly Commissions have been appointed to keep a careful watch on monopoly enterprises.

A powerful restraint on monopolists is the fear of an active consumer boycott. Monopolies thrive on public relations and no monopolist can afford to offend a large number of his customers.

The monopolist lives in constant dread of rivals and he will not make profits so attractive as to attract competition for a share of the market. Monopolists are also afraid of the development or substitutes.

The monopolist has to tread very carefully if the demand for his product is elastic. The higher the elasticity of demand, the weaker the position of the monopolist.

Finally, the monopolist lives in constant fear of State intervention. In a representative system of Government, the State has to be responsive to the satisfaction of the consumers, and an extensive hue and cry by the public is bound to attract active State intervention to redress public grievances.

In conclusion, it should be observed that while the monopolist does, in a way, infringe on the supremacy and the sovereignty of the consumer by limiting his choice, nonetheless, he generally provides a reasonably efficient service at a generally accepted price.



# Imperfect Competition

## Meaning and Significance of Imperfect Competition

Imperfect competition is also commonly referred to as monopolistic competition. It should be clearly understood that **MONOPOLY** and **MONOPOLISTIC COMPETITION** mean completely different things. Imperfect or Monopolistic Competition refers to the market situation in which there are many producers producing goods which are close substitutes of each other. Each producer sells a product which is only a little different from that sold by his competitors. Each of these firms is large enough not to be seriously affected by the policy of another firm producing a similar product.

Imperfect or Monopolistic Competition is also characterised by **PRODUCT DIFFERENTIATION**. A concerted effort is made by the producer through advertisements and the use of mass communications media to create an impression in the mind of the buyer that the product of any one firm is not a perfect substitute for the products of any other firm. This subtle form of product differentiation gives each producer something of the position of a monopolist, but he cannot behave with the impunity of a monopolist because of the presence of other firms whose products can in reality be substituted for his own product.

In real life Perfect Competition and Monopoly are extreme positions which are the exception rather than the general rule of economic activity. Imperfect or Monopolistic Competition is the more popular and the generally accepted way of doing things. A very good example of Monopolistic Competition is the soap industry where, even in an under-developed country like Pakistan, there are over a dozen concerns selling basically the same product under different brand names.

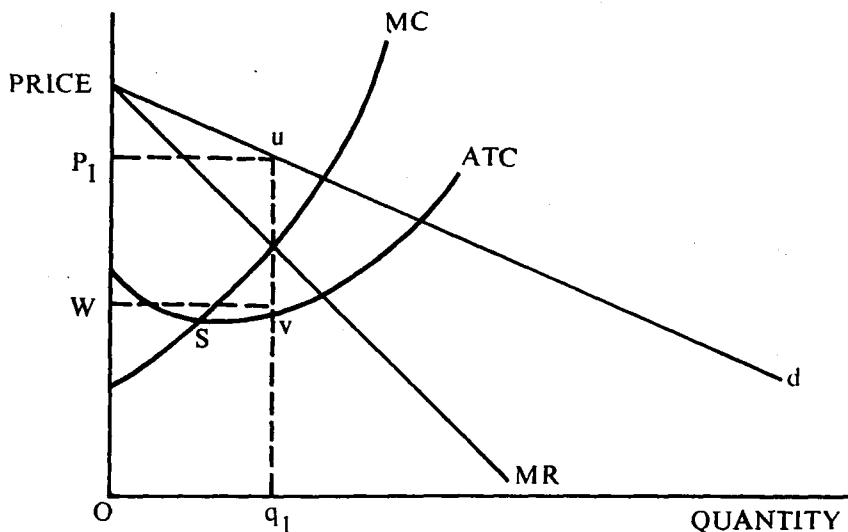
## Determination of Price under Imperfect Competition

The equilibrium of the firm under Imperfect or Monopolistic Competition will be at that level of output and at that level of prices at which profits are maximum. The firm will go on producing until the extra receipts from the additional units of production (marginal revenue) exceed the extra cost of the additional units of production (marginal cost). They will go on increasing production as long as marginal revenue is in excess of marginal cost because, by so doing, the firm will keep on increasing its profits. The firm will have to start reducing production, once marginal cost exceeds marginal revenue. Thus in the **short run** (or short term) the firm will be in equilibrium when **MARGINAL REVENUE** is equal to **MARGINAL COST**.

It will be observed that the short-term equilibrium position of a firm operating under conditions of Monopoly or Imperfect Competition is the same. The diagram illustrating this position is identical to that shown in the preceding chapter on Monopoly. For convenience of reference this diagram is reproduced again.

It would be observed that profits are maximum at the level of output and price at which marginal revenue is equal to marginal cost.

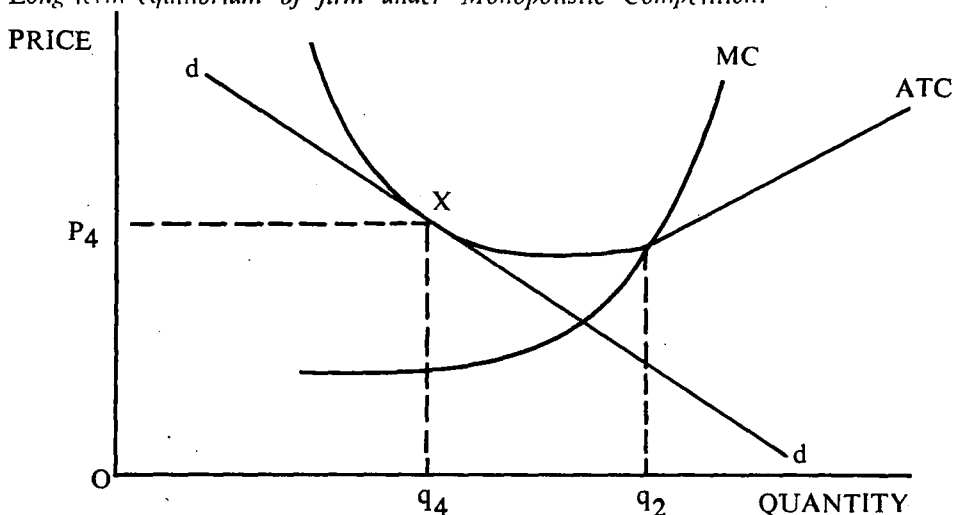
*Short-term equilibrium of a firm under imperfect competition.*



The long-run equilibrium of a firm under imperfect or monopolistic competition will be much less favourable to the firm as compared to the equilibrium position in the short run. This would be clear from the following analysis.

The high margin of profits of the firm in the short-run will be an incentive for new firms to enter the industry. With the entry of the new firms, the total demand for the product will have to be shared amongst a larger number of firms, thus reducing the share of each of these firms in the total market. From this it follows that, at any given price, each of the firms would only be able to sell less than it could before the influx of the new firms; the demand curve will shift to the left indicating that the demand has been relatively reduced at every level of price. This situation will continue to be aggravated from the point of view of the producers; that is, the demand curve will continue shifting further to the left until the stage is reached when profits are reduced to zero. At this stage the average revenue curve or the demand curve will be tangent to the average total cost curve, which means that the AVERAGE REVENUE OR PRICE will be equal to the AVERAGE TOTAL COST. The diagram below illustrates the long-term equilibrium of the firm under monopolistic competition.

*Long-term equilibrium of firm under Monopolistic Competition.*





It is clear from the preceding diagram that at any level of output, other than OQ, losses will occur, since average revenue is less than average total cost. It would be also observed that, under imperfect monopolistic competition, each firm is faced with the problem of EXCESS or UNUSED CAPACITY. Monopolistic competition also results in production under decreasing average cost. The reason for the firm not increasing production, despite the presence of decreasing average costs, is the fear of falling revenues occasioned by having to lower its price in order to sell more. The firm will continue to produce only upto the point where MARGINAL REVENUE is equal to MARGINAL COST, even if the firm is in a position to expand production at decreasing average total cost.

To conclude: the long-run equilibrium of the firm under imperfect or monopolistic competition is that level of output and prices where.

$$\text{PRICE} = \text{AVERAGE TOTAL COST},$$

$$\text{that is } \text{MARGINAL REVENUE} = \text{MARGINAL COST} = \text{PRICE}.$$

### Comparison of Perfect Competition, Monopoly and Imperfect or Monopolistic Competition

A comparison of the main characteristics of Perfect Competition, Monopoly, and Imperfect or Monopolistic competition is both interesting and useful in order to draw up a balance-sheet of their points of respective strength and weakness. Such a comparison would bring out the following points:

Perfect Competition	Monopoly	Imperfect or Monopolistic Competition
1	2	3
i) Many firms; free entry and exit of firms.	i) One firm preventing entry of other firms on account of both economic and legal and institutional barriers.	i) A few firms with possibility of entry of new firms.
ii) Homogeneous product	ii) Homogeneous product with no close substitutes.	ii) Although products are capable of substitution, product differentiation is emphasised through creation of an impression in the mind of the buyer.
iii) Production is increased to the level where Marginal Cost=Price. This is the equilibrium position of the firm at which profits are maximum.	iii) Production is increased to the point where Marginal Revenue=Marginal Cost Price. This is the equilibrium position of the firm at which profits are maximum.	iii) Production is increased to the point where Average Total Cost=Price, or Marginal Revenue=Marginal Cost = Price. This is the equilibrium position, at which profits are maximum.
iv) All firms face a fixed demand schedule or demand curve.	iv) The firm faces a fixed demand curve.	iv) In the short run firms face a fixed demand curve, but in the long run there is a continued decrease in demand at every price and the demand curve continues to shift to the left. The demand curve is

more elastic as compared to that in Perfect Competition and Monopoly.

- |   |  |   |
|---|--|---|
| <p>v) Production is maximised and there is no problem of excess capacity.</p> | <p>v) Production is deliberately held back at the point where <math>\text{Marginal Revenue} = \text{Marginal Cost}</math>, which is less than Price.</p> | <p>v) In the long run, Production is deliberately held back at the point where <math>\text{Marginal Revenue} = \text{Marginal Cost} = \text{Price}</math>, despite the presence of excess capacity and decreasing average cost.</p> |
| <p>vi) Does not attract public criticism and government intervention.</p>     | <p>vi) Attracts severe public criticism and governments generally try to regulate the output and prices of the firm.</p>                                 | <p>vi) Does not attract government intervention but is liable to public criticism on the ground of wastage of resources.</p>  |

## Oligopoly

Oligopoly is derived from a Greek word meaning "few". Oligopoly implies that because producers are few, the pricing and output policy of any one producer is of significance to the other. Any change in the pricing and output policies of any one firm will bring a quick and sharp reaction from the other firms producing that product. If a firm manufacturing a particular brand of soap embarks on a massive advertising campaign, it may, in the short run, capture a large share of the market. But ultimately the other firms producing other brand names of soap will retaliate by stepping up their advertisement campaign, and the original company will find it has expanded its sales very little, and everybody is a loser. A keen sense of rivalry among the firms would create conditions of imperfect or monopolistic competitions, but in the long run, the price may settle at a point in between monopoly price and that attained under cut-throat competition.

# Theory of Consumption

## Consumer Sovereignty

Consumption is the act of using consumption goods, i.e., the using of utility. Economics deals with the twin problems of scarcity and choice. In other words the consumer has to rationally allocate the limited resources available to him for consumption amongst various items of consumption in order to **MAXIMISE SATISFACTION**.

From this arises the concept of **CONSUMER SOVEREIGNTY**. The consumer is generally regarded as the supreme commander of the economy because of his control on the market. This notion is based upon the forces of **DEMAND**. If the price is low consumers will demand more and producers will be induced to produce more. If prices are higher than what consumers are prepared to pay, then demand falls, prices fall and production is reduced. Thus consumers dictate not only the quantity of each item which is produced but also the kind of items that are produced and their quality. The importance of consumer sovereignty is, however, diluted in the case of monopoly firms and firms operating under conditions of imperfect or monopolistic competition where demand is created through advertising.

## Law of Equimarginal Utility

It is extremely important to understand the behaviour of the supreme commander of the economy—the ultimate consumer—for whom all goods and services are produced and towards whom all economic activity is directed. An individual buys consumer goods just as the firm buys inputs, and like the firm the consumer transforms it into a final product whose worth has to be estimated. The final product of the consumer, however, is not a physical product which can be handled or tested; it is a psychological product which is described as “utility”. The consumer builds the edifice of his satisfaction by buying food, clothing, amusement and durable consumer goods. Utility is thus the ultimate product of all economic activities.

The **LAW OF DIMINISHING UTILITY** clearly illustrates that the consumption of successive units of the same commodity leads to a situation in which total utility increases but at a diminishing rate. The marginal utility of any quantity of commodity is the increase in total utility which results from the consumption of an additional unit of that commodity. The law of diminishing utility can also be called the law of diminishing marginal utility because the marginal utility derived from consumption of successive units of the same commodity keeps on decreasing. The main reasons for the operation of the law of diminishing marginal utility are that particular wants are satiable and that commodities are imperfect substitutes for one another. Even if we consume as much of a commodity as we wish without making any sacrifice, we will still be not able to consume an indefinite amount because after a point the additional satisfaction derived from the consumption of an additional unit would be zero or negative. It is also obvious that even allied items of consumption, such as bread and butter, are by no means perfect substitutes for one another; there is the best proportion in which bread and butter can be used, and any variation in this proportion would not yield maximise satisfaction.

We have to find a principle according to which a consumer can divide his income amongst a variety of competing uses so as to maximise his satisfaction. In other words we have to find the best distribution of expenditure amongst a number of alternative uses. This principle is stated by the **LAW OF EQUIMARGINAL UTILITY** or **LAW OF SUBSTITUTION** which states:

“A Consumer, consciously or unconsciously, tries to get maximum utility out of his expenditure in the market. This he achieves with greater success when he distributes

his income over various heads of expenditure in such a way as to get equimarginal utility from each head of expenditure. In other words, total utility is maximum when marginal utility of money spent on each good is the same."

The Law of Equimarginal Utility can be illustrated from the following Table:

*Marginal Utility from Consumption of*

Units	Food	Clothing	Shoes	Recreation
1.	100	90	75	85
2.	95	80	45	75
3.	90	65	15	45
4.	80	45	0	5
5.	65	30	negative	negative
6.	45	5	"	"
7.	20	0	"	"
8.	0	negative	"	"
9.	negative	"	"	"
10.	"	"	"	"

Suppose that 45 "Utils" are equal to 100 rupees and that our consumer has an income of 1,500 rupees a month. The consumer can maximise his satisfaction if he consumes 6 units of food, 4 units of clothing, 2 units of shoes, and 3 units of recreation. Any other distribution of resources amongst these items will lead to a lower degree of satisfaction. The theory of equimarginal utility not only applies to the expenditure of money but also to the expenditure of 24 hours of times in a day. In deciding whether or not to go the cinema, we must balance the utility to be derived from the 3 hours spent in the cinema house against advantage obtained from 3 hours spent in some other way, such as resting in bed, studying, or spending the time with the family. If we have been to the cinema 4 times during the past week, the marginal utility of time spent in the cinema will be low. If we have been neglecting our studies and are faced with a coming examination, the marginal utility of time spent on study will be high. As a consequence if we are rational people we should choose to study rather than go to the cinema.

Just as we have the equilibrium of the firm, so also we have the position of **EQUILIBRIUM OF THE CONSUMER**. The equilibrium position of the consumer can be arrived at by dividing the marginal utility by the price. If the marginal utility of food at a certain level of consumption is 45 "utils" per pound (lb) and the price of food is 2 rupees per pound then the weighted marginal utility of food would be  $45/2$  or 22.5. The best division of expenditure is that at which the weighted marginal utility in all lines of expenditure is equal. The equilibrium position of the consumer is, therefore, that in which the expenditure of an extra rupee in all lines of expenditure yield equal marginal utility. If this is not so, it would increase the level of satisfaction to transfer expenditure from commodities where the weight marginal utility is low to commodities where it is high.

The law of equimarginal utility is subject to two serious limitations. First, it assumes that goods and services are divisible. In real life a number of goods and services are not divisible. For instance, one cannot buy 1-1/2 cars or half a bus ticket. The second limitation of the law of equimarginal utility is the indefinite budget period. The equimarginal principle assumes that we have a definite quantity of money to spend, but that we only have this quantity within a definite period of time. When we buy, for instance, a car or a bicycle we have to consider its utility over a much longer period than the budget period. The longer the budget period the fewer the problems created by the effect of indivisibility. Some indivisibility is, however, bound to occur as the accounting period and the period over which a particular good yields utility does not usually coincide.

## Consumer's Surplus

The concept of consumer's surplus was first enunciated by Alfred Marshall in the following words:

“The excess of the price which he (that is the consumer) would be willing to pay (rather than go without the thing) over that which he actually does pay is the economic measure of this surplus satisfaction)... It may be called Consumer's Surplus.”

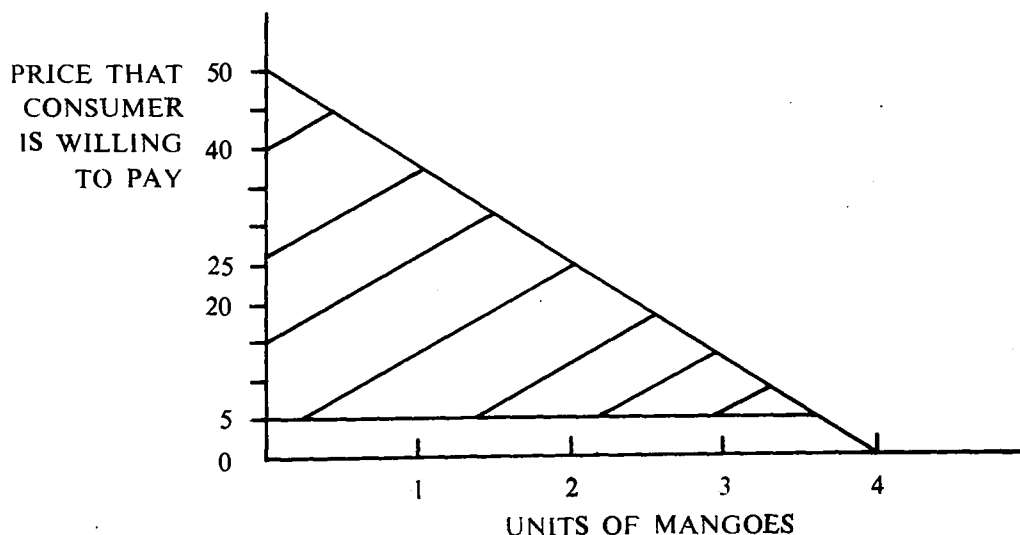
In short consumer's surplus is the difference between what a consumer actually pays for a commodity or service, and the maximum amount he would be prepared to pay for it.

The concept of consumer's surplus arises from the law of diminishing utility under which the additional satisfaction (utility) derived from the consumption of every successive unit of a commodity keeps on decreasing. This can be illustrated from the following table:

Units of mangoes	Total Utility	Marginal Utility
1	50	50
2	90	40
3	115	25
4	120	5
5	120	0
6	110	—10
7	85	—25

If the price of mangoes is 5 rupees a unit and the utility of 5 rupees to our consumers is 5 'utils', then our consumer will buy 4 units of mangoes. For these 4 units, the consumer will actually pay  $4 \times 5 = 20$  rupees. The consumer has in reality enjoyed a total utility of 120 utils which is worth 120 rupees at the rate of 5 rupees to 5 utils (or 1 rupee per util). Thus the consumer has enjoyed a consumer's surplus of 100 utils or 100 rupees by consuming 4 units of mangoes for which the market price was 5 rupees per unit. Consumer's surplus can be expressed by the following formula:  $\text{Consumer's surplus} = \text{Total Utility (expressed in money terms)} - \text{Price} \times \text{number of units purchased}$ .

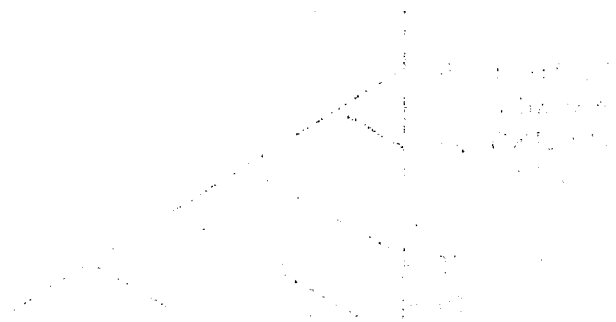
Consumer's surplus can also be shown by a diagram as under:



The above diagram illustrates the preceding table. The shaded portion indicates the consumer's surplus enjoyed by our consumer in the purchase of 4 units of mangoes at 5 rupees a unit.

In practical life the measurement of consumer's surplus poses certain difficulties. First, the marginal utility of money is assumed to be constant, which is actually not so. Secondly, the intensity of desire to consume successive units of a commodity vary widely from person to person. Again, in the case of necessities or conventional necessities the consumer's surplus is almost indefinite.

In practice the concept of consumer's surplus has three main uses. First, Finance Ministers are inclined to levy a higher rate of taxation on those items in the consumption of which there is a high level of consumer's surplus; in these cases the increase in prices as a result of increased taxation will not materially affect the level of demand. Secondly, the monopolist can charge a higher price for such goods without fear of a drop in demand; in fact in the case of goods and services which yield a large amount of consumer's surplus, the monopolist can charge what the market will bear. Thirdly, consumer's surplus is a measure of the benefits of international trade. If the introduction of imported goods makes life cheaper than what it was on the basis of the consumption of domestic goods, the difference between the two sets of prices would be a measure of consumer's surplus as also of the benefits of international trade.



# Rent

## Definition of Rent

Rent, in every day usage, means the money paid for hiring a house, a television set, etc.; it generally signifies a periodic payment for the use of something. In Economics, rent has a completely different connotation which bears no relationship to this concept of rent.

The political economist David Ricardo (1772-1823) made the first attempt to define economic rent by describing it as "that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil." Marshall enlarged on this definition to extend the concept of rent to "the income derived from the ownership of land and other free gifts of nature." Latter day economists have further enlarged the scope of rent to include other factors of production which are in fixed supply, even if only for short periods of time. In these cases there would be no economic rent if they enjoyed perfect elasticity of supply (that is, it is not necessary to increase price in order to attract an increase in supply). If the supply of any factor of production is not perfectly elastic a higher price must be offered to induce a greater quality of that factor of production to come on the market. The increase in the price so offered is the measure of economic rent.

Economic rent is now defined as any payment to a unit of a factor of production, in an industry in equilibrium, which is in excess of the minimum amount necessary to keep that factor in its present occupation.

## Ricardian Theory of Rent

The Ricardian theory of rent owes its origin to his concept of rent being "that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil." Economic rent, according to Ricardo, is confined only to land and is the surplus left after the expenses of cultivation (payments for all inputs including labour and capital) have been met.

The Ricardian concept of economic rent arises from the necessity of cultivating lands other than the best land. As population increases so does the demand for agricultural production, and there is a general upward trend in both extensive and intensive cultivation. Lands which are more fertile or are better located enjoy a larger surplus (economic rent) as compared to the less fertile and less well-located lands.

The Ricardian theory of rent can be illustrated by the following chart:

Return of tobacco in kilograms per acre.

Doses of labour and Capital	A	B	C	D
1st	100	90	80	70
2nd	90	80	70	60
3rd	80	70	60	50
4th	70	60	50	40
5th	60	50	40	30
6th	50	40	30	20
7th	40	30	20	10

Standard units of labour and capital are called "doses" of labour and capital applied to four different categories of land (A, B, C and D). Apparently "A" land is relatively the best and "D" land the poorest. Suppose the demand for tobacco has increased to the point where the cost of 50 kilograms of tobacco is equal to one dose of labour and capital. In this situation 6 doses of labour will be applied to "A" land, 5 to "B" land, 4 to "C" land, and 3 to "D" land. The economic rent of "A" land will be 450 kilograms of tobacco ( $100+90+80+70+60+50=450$ ) minus 300 kilograms of tobacco (cost of 6 doses of labour and capital  $=6 \times 50=300$ ) is equal to 150 kilograms of tobacco. Similarly "B" land enjoys an economic rent of 100 kilograms and "C" land enjoys an economic rent of 60 kilograms of tobacco. It can also be readily observed that "D" land, which is the poorest land, also enjoys an economic rent of 30 kilograms of tobacco ( $70+60+50-50 \times 3$ ) on account of intensive cultivation on the same land.

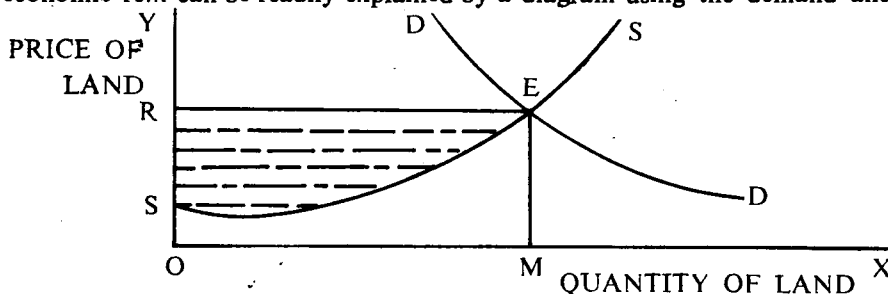
The Ricardian theory suffers from several limitations. First, there is no such thing as the "original and indestructible powers of the soil"; good lands after being constantly cultivated lose their fertility and have to be revitalised by the use of organic and inorganic chemicals and a rotation of crops. Secondly, Ricardo uses the term fertility of land in a narrow sense and does not cover the matter of location of land and the techniques of production. Thirdly, Ricardo's concept of economic rent arises out of extensive cultivation; but as we have observed, economic rent also accrues from extensive cultivation even on the poorest quality land. Fourthly, carrying the Ricardian theory to its logical conclusion, since marginal land pays no rent and price is determined by the cost of production, rent is not a component of the cost of production; this is not true since from the point of view of an individual farmer payment has to be made to prevent land from being transferred to some other use. Finally, the main criticism of Ricardo arises from those who rightly consider the concept of economic rent to be applicable as much to wages, interest and profits as to land; this is the basis of the Modern Theory of Rent.

## Modern Theory of Rent

Economic rent for any factor of production and including land, arises because the supply of it is scarce in relation to the demand. If the supply of any factor of production is perfectly elastic it will not be necessary to offer it a higher reward in order to induce it to come to the market and, therefore, it will not enjoy any economic rent. Fundamentally, rent is paid for land because its produce is scarce in relation to its demand. In the presence of such scarcity, rent will arise even if all the land is identical and it will also arise on the most inferior land. This is also true of wages, interest and profit. It is a truism that the better article will always command the higher price; thus better labour gets higher wages and a superior entrepreneur earns higher profits.

We have defined economic rent as any payment to a unit of a factor of production, in an industry in equilibrium which is in excess of the minimum amount necessary to keep that factor in its present occupation. The remuneration of any factor of production, including land, is determined by the equilibrium between the demand for and supply to that factor. The scarcity of land is derived from the scarcity of its products. SCARCITY explains all values and rent is no exception.

The concept of economic rent can be readily explained by a diagram using the demand and supply analysis.





DD is the demand curve and SS is a somewhat elastic supply curve for land. In this case OM land is used and rent per unit is  $OR=ME$ . The total earnings are OMER and the actual payment is OMES, leaving an economic rent represented by the shaded portion SER. This analysis is also equally applicable to wages, interest and profits.

### Quasi-Rent

Marshall introduced the concept of Quasi-Rent to be applied to the economic rent or surplus earned by factors other than land. The term rent was applied to surplus from land and other free gifts of nature, and quasi-rent to the additional income derived from man-made factors of production, that is, labour, capital and organisation. Quasi-rent stands for the **entire** income yielded by a factor of production when the demand for it suddenly increases and supply cannot be increased in response to the demand in a short period.

Quasi-rent is only a temporary surplus occasioned by unforeseen or unavoidable circumstances causing shortages. The temporary shortage in supplies cause surplus earnings which are called quasi-rent. In the long-run, quasi-rents tend to disappear as more and more supplies reach the market.

### Rent and Price

According to Ricardo, there was no relationship between rent and price, because rent did not enter into the cost of production of the produce and did not, therefore, affect its price. Price is determined by the cost of production at the margin where there is no rent; hence rent does not influence price. It would be observed that the marginal dose of labour and capital just pays for itself and does not in any way contribute to rent. In actual fact, the position of the marginal factor of production is determined by price. Price determines rent and it is by no means determined by rent.



# Wages and Labour Problems

## Definition of Wages

Wages are the emoluments paid to labour which is one of the four factors in production. They are the payments made to workers for placing their time, energy and skill at the disposal of an employer. The employer has the discretion to use the time, energy and skill placed at his disposal according to the method which he chooses. The amount of payment made for such services, which is called wages, is in accordance with the terms stipulated in the service contract.

There are two main methods of paying wages: by time, and by piece. Time rates are generally by hour, shift, week, or month for a specified number of hours. The time rates are frequently accompanied by an additional bonus element in order to reach a certain output. The production taken into account for bonus payments may be the contribution of individual workers or of a group of workers. Piece-wages (reflecting piece-work) are payments made to labour for a certain quantity and quality of output, according to an agreed schedule indicated in the service contract.

## Real and Nominal Wages

Nominal wages are those wages which are paid in terms of money. Money wages cannot correctly reflect the economic position of a worker. For instance a truck driver may be earning Rs. 500 a month as against Rs. 200 a month earned by a driver doing domestic service. The truck driver has to work for long hours and continuously for long periods; he does not get free food, or free lodging or free clothes. The driver who does domestic work may well be better off at Rs. 200 per month because he has the added facilities of free food, free clothing and free lodging, and lesser hours of work and, above all, less strenuous work as compared to the truck driver who makes Rs. 500 per month. It is, therefore, important to consider the real wages of a person by taking all the relevant factors into consideration.

The main factors which govern real wages are as follows:—

### i) PURCHASING POWER OF MONEY

A comparison of wages at different places and at different times must take into account the variations in the purchasing power of money. A substantial part of the higher wages offered to Pakistani labour in the Persian Gulf States is on account of the far higher cost of living in those countries.

### ii) SUBSIDIARY EARNINGS

In addition to the regular nominal money wages which are earned, a person could be making extra earnings in the form of money or goods and services. Examples of such subsidiary earnings are free boarding and lodging provided to domestic servants; earnings of teachers from writing books, private tuition and marking of examination papers; the generous facilities provided to airline crew on international flights.

### iii) REGULARITY OR IRREGULARITY OF EMPLOYMENT

Regular employment may give lower money wages, but the real wages may be higher than those in insecure employment, which may give higher money wages. For instance, a munshi who earns 400 rupees a month on a regular basis would be much better off than a skilled mason who while earning 18 rupees per day, may not be sure of securing work for more than 20 days a month.

iv) **EXTRA WORK WITHOUT EXTRA PAYMENT**

If an employee is required to do extra work without being paid for it, his real wages decrease to that extent. Senior Government servants are paid for their duty during working hours, but quite often they are required to work for late hours and they are paid nothing for it.

v) **CONDITIONS OF WORK**

Some types of work are more enjoyable, their environment much better, and in some cases the hours of work shorter than many others. All these things have to be taken into account when determining real wages.

vi) **TRAINING EXPENSES**

Some professions need long years of training and huge expense before one can be admitted into them such as the medical profession, engineering, and the legal profession. The higher wages obtaining in these professions should be considered in the light of the expenditure incurred and the time spent in entering the profession.

vii) **FUTURE PROSPECTS**

Low money wages should be considered high real wages if there are good prospects of improving one's position in the future. A high initial salary, with limited future prospects should not normally be preferred to relatively lower salary but with a bright future.

## **Relative Wages and Causes of Wage Differentials**

There are wide differences in the wages earned by labour in various occupations and localities, and sometimes even in the same occupation or locality. The main causes of differences in wages are:

i) **Difference in efficiency**

Human beings vary in efficiency not only on account of some inherent qualities of health and character but also on account of the environment, education and training they have enjoyed. Differences in conditions of work also tend to accentuate the differences in efficiency; happy and amiable working conditions generally make for more efficient labour. Wages are different, and should indeed be so, when efficiency is different.

ii) **Existence of non-competing groups**

These differences arise because of the difficulties in the way of the majority of labour moving from low-paid to high-paid employment on account of geographic, social or economic considerations. Such difficulties may also arise from lack of transport facilities, existence of family ties and class or caste barriers, and lack of suitable opportunities for securing the required education and training.

iii) **Difficulty of learning a trade**

Everybody who may so desire is not in a position to acquire the education and training necessary for learning some trade, and the number of those who can study for such trades is relatively small in the labour force, despite the fact that their supply is less than demand and their wages are consequently higher. Examples of this are the medical profession, engineers and military officers.

iv) **Social status of the employment and agreeableness or disagreeableness of employment**

Disagreeable employment must secure higher wages to attract labour. Disagreeable work which does not also enjoy social esteem commands higher wages. For example, a family of sweepers in Pakistan earns more money than an educated junior Government employee.

v) **Future prospects**

Occupations in which there are bright prospects for promotion can secure entrants at a lower level of salary than those occupations which have limited chances of progress. In the latter case the initial start has to be higher. It should also be stressed that the number of top jobs available in a profession should be taken into account when evaluating future prospects.

vi) **Regularity of employment**

Jobs which are of a temporary nature command higher wages than regular employment which generally carry lower wages.

vii) **Hazardous occupations**

Occupations of a hazardous nature, such as coal mining, command higher wages as compared to those in which there is very little risk to life and limb.

viii) **Causes affecting real wages**

The causes affecting real wages have been discussed in the preceding paragraphs. It can happen that the inequality between wages is only in terms of money wages and not in terms of real wages.

## **Theories of Wages**

There are several theories of wages, as enumerated below:

i) **Subsistence Theory of Wages:** This originated from the Physiocratic School of French Economists and was generally accepted during the 19th Century. In Germany it was called the Iron Law of Wages or the Brazen Law of Wages.

ii) **The Wages Fund Theory** was enunciated by John Stewart Mill as follows:

“Wages depend upon the demand and supply of labour or, as it is often expressed, on the proportion between population and capital. By population is here meant the number only of the labouring classes or rather of those who work for hire, and by capital only circulating capital and not even the whole of that, but the part which is expended on the direct purchase of labour”.

iii) **The Residual Claimant Theory** advanced by the American Economist Walker, claims that wages are the residue left over after the other production factors have been paid.

iv) **The Marginal Productivity Theory** is applicable to all factors of production, including labour, and can in fact be called the general theory of distribution.

v) **Taussig's Theory of Wages** is a modified version of the Marginal Productivity Theory of Wages. According to Taussig, wages represent the marginal discounted product of labour since the worker cannot get the full amount of his marginal output. This is because production takes time and the final product of labour cannot be taken into account immediately. Labour has, however, to be supported in the meantime and this is done by the employer. The employer does not pay the full amount of its marginal product to labour.

vi) **The Modern Theory of Labour** is based on the supply and demand analysis but takes the Marginal Productivity Theory fully into account.

## **Subsistence Theory of Wages**

According to the Subsistence Theory of Wages, wages tend settle at that level which is just sufficient to maintain the worker and his or her family at minimum subsistence. If wages are higher, workers are encouraged to marry and have large families; this increase in the supply of labour brings wages down to the subsistence level. If wages fall below the subsistence level, marriages and births are discouraged and poverty increases the death rate, causing the labour supply to be decreased until wages rises again to the subsistence level.

Karl Marx made the Subsistence Theory of Wages, advocated by the Physiocratic School of French Economists, the basis of his theory of exploitation.

During the latter half of the 20th Century this theory has not been borne out by the realities of life. Gone are the days when labour could be kept at a subsistence level. The advent of political freedom has created political consciousness which does not allow the exploitation of labour. Labour, through exercise of the vote at election time has become a power to reckon with. Politicians how woo labour. Karl Marx, ignored this factor, which was not so pronounced in his time. The subsistence theory of wages does not also explain the differences between wages in the same as well as in different employments; further this theory is not valid as it does not take into account the demand for labour.

## Marginal Productivity Theory

The Marginal Productivity Theory forms part of the general theory of distribution, and it applies to all factors of production, including labour. The entrepreneur, representing Organisation, works for profit and he has to distribute his inputs (or payments) in the form of wages, rent, interest, etc. in such a way that the price paid for factors of production is worthwhile. No factor of production can be paid more than its marginal productivity i.e., the addition made to total production by employment of the marginal unit, which the employer thinks is just worthwhile employing. In the presence of open competition, no factor of production will accept a payment which is less than the equivalent of marginal productivity. The employer will keep on adding additional units of the factor of production concerned until such time as its marginal productivity is greater than its remuneration and he will stop at that point where the marginal productivity is equal to the remuneration. The entrepreneur is employing various factors of production according to the principle of substitution. A unit of the factor with lower marginal productivity is substituted by a unit of another factor with a higher marginal productivity, and this process of substituting one factor for another continues till the marginal productivity of all factors is equalized. This combination of the various factors of production will be the best combination yielding the employer the maximum profit.

It is clear that at the margin of employment (the point at which the additional unit yields just enough additional revenue to balance its cost), the payment made to a factor of production is just equal to the value of the addition made to total production on account of employment of the additional unit of labour. Thus, if the prevailing wages are less than marginal productivity then more labour will be employed. Competition amongst employers for labour will raise the level of wages to the level to its marginal productivity. If wages are higher than marginal productivity, employers will undergo a loss and they will reduce their demand for labour. This will result in the level of wages coming down to the level of marginal productivity. Thus competition tends to equalization of marginal productivity and wages.

Since the remuneration of a factor of production is fixed by its marginal productivity, it is clear that the marginal productivity of various factors of production is proportionate to their respective prices. The marginal productivity theory of distribution is proportionately the best approach to the sharing of the national output amongst various factors of production, including wages.

This theory is, however, subject to certain limitations. It assumes that all units of all the factors of production, including labour, are homogeneous so that any one worker is as good as another; this is not so. It also assumes that one factor is capable of being substituted for other, but it is not always possible to substitute labour for capital and *vice versa*. Secondly, it is assumed that the factors of production are mobile as between various uses; in practice, this is not so. The Marginal Productivity Theory has been criticised by John Maynard Keynes on the ground that one implication of this theory is that employment can be increased only if wages are lower. According to Keynes, total employment in the country depends on effective and aggregate demand and not on the level of wages. It is also pointed out against the Marginal Productivity Theory that the efficiency of labour or its marginal productivity also depends on wages; wages are not only determined by efficiency but they also, in turn, influence the level of efficiency.

**The marginal theory of distribution is only valid under the assumption of perfect competition.**

Samuelson has well remarked: "It (marginal productivity theory) is not a theory that explains wages, rents, or interests; on the contrary, it simply explains how factors of production are hired by the firm, once their prices are known."

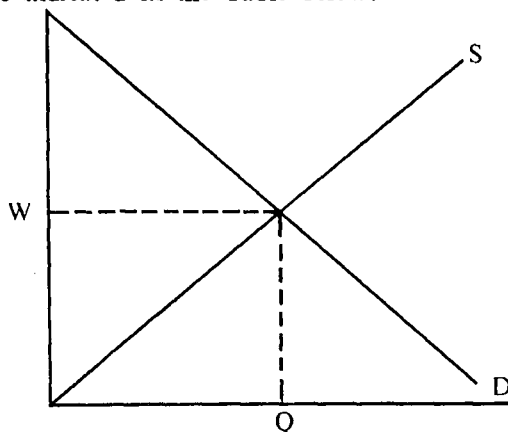
The Theory of Marginal Productivity of Wages indicates that under conditions of perfect competition in the labour market and in the market for the products of the industry, irrespective of the number employed, every worker will receive wages equal to the value of the marginal net productivity of his labour. This theory can be criticised on the grounds that it is static theory while we live in a dynamic world. All other factors are never constant, competition is never perfect, the majority of labour is generally immobile, all labour is not of the same quality, remuneration to other factors of remuneration is not constant, and the prices of products of labour vary. The Marginal Productivity Theory of Wages, however, is true as being indicative of a trend and is of great use in understanding the basic forces that should determine wage rates.

### Modern Theory of Wages

According to the Modern Theory of Wages, wages are the price of labour which are determined, like the price of anything else, by the interaction of the forces of demand and supply. The Demand for Labour is a derived demand which depends upon the demand for the commodities or services it helps to produce. The greater the demand for its products and services, the greater the demand of the producer for the labour required in making it. An increase in the demand for a commodity will increase the demand for the type of labour that produces the commodity. The elasticity of the demand for labour will, therefore, be reflected in the elasticity of demand for its output. If wages constitute only a small proportion of the total cost, the demand for labour will be generally inelastic. If, on the other hand, the demand for a product which is produced by labour is elastic, then the demand for such labour will also be elastic. The Demand will also be elastic if the commodity has close substitutes. The demand for labour will also depend on the prices of other factors of production. If the cost of the machinery is high, as compared to manual labour, the demand for labour will increase. The advance of science and technology also affects the demand for labour; the introduction of power-looms, for instance, has adversely affected the demand for labour in the textile industry.

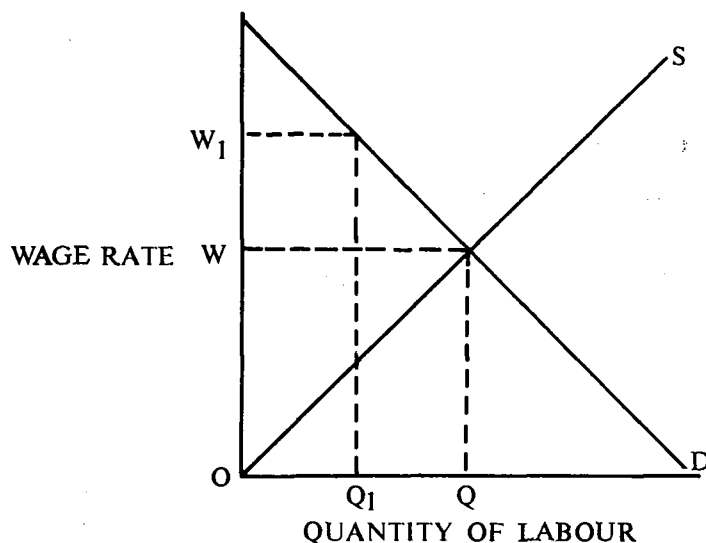
The supply of labour means the total number of hours of work that the working population is willing to supply. This, in turn, depends on the size of the population, the labour force which means the proportion of the population entering the labour market, and the number of hours worked.

In a perfectly competitive market wages will be determined by the interaction of the forces of demand and supply as indicated in the Table below:—



In this case the wage is  $OW$  and the quantity of employment is  $OQ$ ,  $OW$  also measures the value of the marginal product of labour.

The determination of wages with the introduction of trade unions leads to a situation in which the volume of employment is determined by the quantity of labour which employers would like to hire at the union-determined wage.



It is quite likely that trade unions attempt to raise wages above their competitive levels. If the wage rate is increased from  $OW$  to  $OW_1$ , then the quantity of labour employed will decrease from  $OQ$  to  $OQ_1$ . A union entering a perfectly competitive labour market can raise the wage above the free market level but only at the cost of lowering the amount of employment. The new wage will create an excess supply of labour at the going rate and consequent pressure or wage-cutting that the union must be powerful enough to resist, if it is to be successful in holding wages up.

Under competitive conditions, wages are, in the long run, equal to the marginal as well as average productivity of labour. If the marginal productivity is greater than the average productivity, it will be worthwhile to employ more labour till marginal productivity falls to the level of average productivity. On the other hand, when marginal productivity is less than average productivity, less labour will be employed till the marginal productivity rises to the level of average productivity. Marginal productivity and average productivity thus tend to be equalised.

### Trade Unions : Definition

Webb has defined a trade union as "a continuous association of wage-earners for the purpose of maintaining and improving the conditions of these working lines." It was not until the advent of the Industrial Revolution in the 19th Century that the factory system came into vogue, entailing the employment of a large labour force by a single employer or by a single organisation. It became necessary for labour to organise and get together, since labour is a perishable input in the sense that a day off means a day's wages gone, and the employer is relatively in a far stronger position than the labourer. Marshall put this very well: "For it must be remembered that a man who employs a thousand others is in himself an absolutely rigid combination to the extent of one thousand units among buyers in the labour market". Trade unions are normally classified into:

- i. *Craft*: A Craft Union comprises workers performing similar operations, like a Taxi Drivers' Union and an Air Pilots' Union.



- ii. *Industrial:* An Industrial Union has members from one industry only, such as the Dawood Textile Workers' Union and the Post Office Employees' Union.
- iii. *General:* A General Union is one without regard to skill or industrial attachment, such as the Pakistan Textile Workers' Union and the Pakistan Transport Workers' Union.

## Functions

The functions of trade unions should be collective bargaining and mutual aid for securing adequate wages, reasonable social insurance, better working conditions, and security of employment for their members. Collective bargaining with the employer or with an Association of Employers should be directed to ensure adequate real wages for the workers.

Trade Unions should attempt to secure real wages to the extent of the marginal productivity of labour. In this way labour can get its due share. Trade Unions can also play a role in improving the marginal productivity of labour by improving the efficiency of labour and also by inducing management to improve labour productivity by using better equipment and better techniques of production.

Trade Unions depart from these normal functions when they enter the political arena and demand a larger slice of the reward than what is warranted by the marginal productivity or efficiency of labour. The tyranny of a powerful Trade Union can be just as harmful and disruptive to the national interest as that of an irresponsible dictator on an economic rampage. Trade Unions play a destructive role when they demand an increase in wages which is higher than the marginal productivity of labour, or an increase which is higher than what is warranted by price increases.

During 1973-75 the British Trade Union movement held the British economy to ransom by demanding wage increases which were wholly disproportionate to their productivity and which were far in excess of the inflationary increase in the general price level. The British Government had to face a demand for a massive redistribution of income from two completely separate sources:

- i) international redistribution of income on account of the rise in the price of oil from \$1.85 per barrel to above \$10.65 per barrel,
- ii) domestic redistribution of income from the middle class to the workers owing to the militant demands of the Trade Unions for wage increases which were far in excess of labour productivity or the general level of increase in prices.

The result has been complete stagnation in the United Kingdom in the levels of saving, investment and production. Unemployment has increased and the balance of payments deficit has reached perilous limits. The Trade Unions have, in a short period, made the United Kingdom the Sick Man of Europe. Much sooner than later the British Government had to face a confrontation with the trade unions to decide who really governs the United Kingdom—the elected Government or the trade unions. Even a Labour Government took the painful decision in early 1976 to slash down social welfare expenditure at the rate of 10 billion dollars per annum and to impose a freeze on wage increases. The underdeveloped countries should take a lesson from the British experience and try to ensure the development of a responsible, albeit well-organised, Trade Union movement.

The weapons of conflict used by Trade unions generally consist of strikes, picket-lines, sit-ins, go-slow drives, and sometimes a downright belligerent behaviour towards the management. Employers, on the other hand, resort to lock-outs, preparing black lists of "difficult" workers or trade union leaders, and sometimes the use of strike-breakers.

## Advantages and Disadvantages

Trade Unions have several points in their favour and can play a critical role in the economy of a country. The main advantages of Trade Unions are:

- i) Trade Unions permit labour to organize effectively to obtain compliance with just and reasonable demands in matters relating to wages, working conditions, social insurance, etc.
- ii) Trade unions make collective bargaining possible. The existence of Trade Unions and Employers' Associations makes it easy for both sides in a dispute to meet and bargain for changes in wages, working conditions, etc. Thus bargaining can be done collectively by representatives of both sides.
- iii) A fair and strong Trade Union can be an effective guarantee of industrial peace, leading to economic stability. The post-war disciplined attitude of the German and Japanese Trade Unions was a major factor contributing to the economic miracle achieved in those countries.
- iv) Trade Unions can also play a useful role in weeding out inefficient employers by insisting on the payment of standard wages.
- v) Trade Unions, in a way, promote the advance of science and technology by encouraging the introduction of labour-saving machinery occasioned by the increased cost of labour. This makes for increased productivity.
- vi) Trade Unions can make for more efficient labour through mutual help and in-service training and advice by the more experienced and seasoned worker.

But Trade Unions are not an unmixed blessing. They suffer from certain disadvantages, the more significant of which are listed below:

- i) Trade union leadership quite often indulges in anti-social activities with a measure of self-confidence that stems from the arrogance of power.
- ii) By insisting on a level of real wages which is higher than what the market can bear, Trade Unions can in effect promote unemployment.
- iii) The attitude of Trade Unions is generally hostile to the modernisation and rationalisation of production on account of the fear of losing a few jobs. This retards technical progress.
- iv) The go-slow and other obstructive labour practices employed by Trade Unions ultimately recoil on labour itself by reducing the gross national product and the level of employment.
- v) The element of the arrogance of power which sometimes permeates Trade Union leadership leads to strikes on flimsy grounds which can hardly justify the impact of the strike on the national economy. Such a situation creates a general sense of public hostility to the Trade Union concerned.
- vi) Trade Unions sometimes create an artificial labour shortage by insisting that only personnel belonging to a Trade Union should be employed. Trade Union leadership sometimes introduces inefficient workers on the 'biradri' wicket.

Whatever be the merits and shortcomings of Trade Unions, the world, including the under-developed countries will have to learn to live with them. The answer to the problem is the creation of wise, learned and responsible Trade Union leadership, responsive to the true and vital interests of the national economy. The International Labour Organization can assist in the creation and conducting of first class institutions to train present and future labour leaders.

## Industrial Disputes

Real or imaginary grievances of labour and management against each other lead to an industrial dispute between the two parties. There is always a bone of contention, real or imaginary, between the two sides. Industrial disputes generally result in strikes, which mean the refusal of workers to go to work, or in lock-outs, with management refusing to allow labour to work. Strikes are much more common than lock-outs.

It has often been debated whether workers should have the right to strike and management the right to declare lock-outs. The controversy takes a critical turn when it relates to some essential public service such as the military and police forces, transport and communications services, such as railways, road transport, shipping, air travel, post and telecommunications, public utilities, like water supply, electricity and gas; and food and defence-oriented industries. In these cases there is a general consensus that the right to strike or declare a lock-out should be strictly circumscribed by law. In the case of other socio-economic sectors the right to declare a strike or lock-out is conceded, provided the party concerned has gone through the ritual of notice, conciliation proceedings, etc.

The main causes of industrial disputes are, generally speaking, as follows:—

- i) The workers demand higher money and/or real wages than what the management is prepared to concede.
- ii) The workers sometime demand greater security of tenure than what the management considers desirable in the interest of maintaining discipline and efficiency.
- iii) The demand of workers for greater participation in management and profits rarely finds favour with management.
- iv) Matters relating to working hours, tea breaks, and the organisation of the production process also lead to industrial disputes.
- v) Action taken by the management against the Trade Union leadership or against the more 'troublesome' but popular members of the labour force is one of the more common causes of industrial disputes.
- vi) A new factor in industrial disputes is the injection of the political element. Industrial disputes are sometimes fermented to settle old political scores establish a political power base, or to create social instability for achieving political aims. This type of industrial dispute cannot be resolved except by strong administrative and political action.

The prevention of industrial disputes is necessary to secure economic and social stability as well as to promote the general good. Everybody is the loser when it comes to assessing the direct and indirect effects of industrial disputes which result in strikes, lock-outs and go-slow or sit-in movements. Workers lose their wages, employers lose their profits and, in fact, incur large losses owing to the continuing presence of fixed costs; consumers are deprived of the requisite goods and services; the national economy loses foreign markets and this loss can sometimes be permanent if foreign buyers lose their trust in the reliability of a particular source of supply; domestic investment and more so foreign investment is actively discouraged; and finally the socio-political atmosphere in the country gets surcharged with tension sometime causing serious damage to the entire fabric of society.

## **Prevention of Industrial Disputes**

The prevention of industrial disputes entails creating conditions which are conducive to promoting industrial peace and harmony. The elements of friction have to be reduced drastically. Machinery should be created to tackle industrial disputes as soon as they are over. Naturally, the first step should be the investigation of the causes of such disputes.

Practical measures for the prevention of industrial disputes can be discussed under six major heads: Procedures for settlement; Minimum wages; Social Security and Social Insurance; Bonus Payments; Profit-sharing and labour participation in management; and Development of personalised family-type relationship.

### **Procedures for settlement of Industrial Disputes**

It is necessary to have settled procedures for the identification, investigation and settlement of industrial disputes. These generally consist of Notice, Conciliation, Joint Industrial Committees, Arbitration, Industrial Courts and Industrial Disputes Tribunals.

Notice has to be given to the other party indicating the nature and extent of the demands.

Normally a fixed period is provided for negotiations after the receipt of notice, and during this period resort cannot be made to a strike or lock-out.

**Conciliation** is the act of bringing the two parties to the dispute together to find a peaceful way out of the dispute. It is in everybody's interest to try all possible methods of reaching a settlement. In order to provide for a regular conciliation process, **Joint Industrial Committees**, consisting of representatives of labour and management, are set-up for each industry of an organisation with the object of regular consideration of matters affecting the progress and well-being of the industry from the point of view of all those engaged in it. Conciliation and Joint Industrial Committees have been quite successful when presided over by independent, strong and honest personalities.

**Arbitration** involves placing the question under dispute before an outside person or independent institution for a decision which is binding on both parties to the dispute. Generally, Arbitration is resorted to when attempts at conciliation have failed.

**Industrial Courts** are appointed by Government and act as permanent and independent tribunals to adjudicate on disputes between labour and employers. In some countries the decisions of the Industrial Courts are binding, while in others their decisions are not legally enforceable, but once a decision has been accepted or acted upon it forms a condition of the contract of employment.

**Industrial Disputes Tribunals** provide for compulsory arbitration and are basically designed for industries producing essential services so that they are not disrupted by trade disputes.

## Minimum Wages

A major cause of industrial disputes is the matter of wage rates. In order to obviate this problem and also to provide for labour basic minimum emoluments, Government establishes by law a minimum wage level to be paid to the employees in certain occupations or industries or locations. Minimum wages are sometimes also established through collective bargaining. Minimum wages may be fixed in certain selected industries, or they may be introduced on a national scale in which case the appropriate nomenclature is **NATIONAL MINIMUM WAGE**.

The following points should be noted if a minimum wage is fixed for certain industries:

- i) If the minimum wage is fixed above the competitive level it will result in unemployment, since Government can only enforce the payment of the minimum wage but cannot force the employers to continue employing all the workers.
- ii) If the higher wage can be shifted to the consumer, the price of the product will rise and there will be no unemployment. Thus when demand for the produce is inelastic, the cost of the higher wages can be passed on to the consumer.
- iii) Higher wages will not result in unemployment if the producer is a monopolist and the demand for the product is relatively inelastic, like the supply of water, electricity, gas, and transport facilities. Higher wages will also not cause unemployment in those industries where wages constitute a small proportion of the cost of production, or where previously the industry was enjoying abnormal profits by "labour sweating" practices.
- iv) The minimum level fixed by the State may be regarded as the maximum by the employers, and this may well result in the levelling down of wages instead of levelling them up.

A **NATIONAL MINIMUM WAGE**, which is a minimum for all the employments in the country, has far greater repercussions than the introduction of minimum wages in certain industries. The following points deserve mention with reference to the fixation of a National Minimum Wage:—

- i) Since everybody must be paid the national minimum wage, there cannot be any redistribution of labour. Unemployment will increase unless the discharged labour improves its efficiency, or conspires with management to accept illegally a lower

rate of wages.

- ii) The National Minimum Wage will have to be a real minimum wage and not a minimum money wage. It will have to be raised when prices rise.
- iii) The burden of the price increase following higher wages cannot be shifted to the consumer, because higher prices must be followed by higher wages, in order to maintain the level of real wages. The results are extensive unemployment, inflation, and stagnation in savings and investment. This situation will lead to an added burden on the social security services in the country.
- iv) Fixing of a National Minimum Wage will be beneficial to labour in those industries where the industrialist has invested heavily in capital goods and specialised equipment, and is, therefore, helpless; cases where the increase in wages improves the efficiency of labour; cases where previously labour was exploited by management and paid wages which were lower than the marginal productivity.
- v) A National Minimum Wage should be advocated for guaranteeing a reasonable living to the workers and for improving their efficiency, for curbing the activities of those unscrupulous employers who unfairly exploit labour, and for weeding out inefficient employees.

The introduction of a National Minimum Wage will lend rigidity to the wage-system and make it inelastic. This will make adjustments between price and cost rather difficult. A high minimum wage will impair the international competitiveness of the industry, while fixing a low minimum wage will not confer any benefit to the workers. The important thing, therefore, is to establish a FAIR WAGE, which in turn is not easy to define. Marshall would have it "on level with the average payment for tasks in other trades, which are of equal difficulty and disagreeableness, which require equally rare natural abilities and an equally expensive training".

Generally speaking, in the case of under-developed countries a FAIR WAGE should be somewhere between the capacity of the industry to bear it (upper limit) and the requirements of an average size family to live with a measure of human dignity and material well-being (lower limit). The upper and lower limits are not fixed and will depend both on the international economic situation as well as on the domestic levels of prices and economic activity. In fact, as in the case of Scandinavian countries, wages should be set by national bargain between Employers association and labour union and ratified by the Government.

## **Social Security and Social Insurance**

Social security and social insurance have almost the same coverage, except that in the former case there is generally a "mean's test" and the State is the main source of financing it. The modern state is committed to social welfare which is designed to ensure minimum standards and opportunities for every citizen. Besides, it is also necessary to provide a measure of security to everybody.

Social security is provided by the provision of social services which primarily deal with the problems of poverty and inequality. They are financed either by the State or by compulsory contributions from the employers and employees as also the State. Hagenhuch has divided social services into three main groups:

- i) The first group consists of national assistance schemes, social insurance (unemployment insurance, health insurance, old-age pensions, disability pensions, and widows' and orphans' allowances), family allowances, and other services providing pensions and grants. The services providing services in the first group are designed to remove "primary poverty", where earnings are insufficient to secure the minimum necessities for the maintenance of physical efficiency.
- (ii) The second group consists of health, education and other public services providing benefits in the form of goods and services. These services, apart from attacking the problem of "secondary poverty" (where earnings would be sufficient for the maintenance of physical efficiency were it not that some portion is absorbed by other useful

or wasteful expenditure), also attack the problem of inequality.

- iii) The third group deals with the provision of services in the form of a **SUBSIDY**, such as the subsidy on wheat, vegetable ghee, housing, school meals and milk.

The basic principles underlying social insurance are: it is provided on a compulsory basis; it is financed by contributions from all parties concerned; benefits are granted as a matter of right without damaging the self-respect of the beneficiary; benefits are intended to provide only a minimum standard of living in order to keep them within reasonable limits; and the contributions of labour and management are kept within their capacity to pay.

The Scandinavian countries provide an excellent example of the provision of social security, where each and every citizen is provided security right from the cradle to the grave. The provision of adequate social security depends not only on the social conscience of a nation, but also on its ability to finance it. The economic base has to be strong enough to finance an adequate social security. On the other hand it is claimed that the extension of social services makes for a stronger economic base by increasing the efficiency of labour and generally raising production and productivity. The truth probably lies somewhere between these two views.

### **Bonus Payments**

Bonus payments are generally paid by management to labour once every year. The amount of bonus payments depends on the profits of the firm. Bonus payments came into vogue in order to give labour the feeling that they too, were participating in the prosperity of the firm, and they should, therefore, avoid industrial disputes which would harm the interests of the firm. These payments generally amount to one to three months' salary. Of course, sometimes bonus payments may be much more or even less. In most countries bonus payments are a tax deductible expenditure; the employer is thus out of pocket only to the extent of a certain percentage of these payments.

In Pakistan where the corporate income tax is in the region of 55 per cent. the employer only pays 45 rupees from his own pocket out of every 100 rupees of bonus payments. In recent years it has become fashionable for trade unions to demand bonus payments irrespective of the profitability of the firm. This is rather unfair. Bonus payments should be taken into account when evaluating real wages.

### **Profit-sharing and Labour Participation in Management**

During the sixties and seventies there have been a spate of proposals for labour sharing in the profits of the firm and participating in its management. These proposals are based on the premise that labour would adopt a more constructive and a more cooperative attitude if it had a personal stake in the profits of the firm and also participated directly in its management. Actually, profit-sharing and participation in management are two separate issues and can be dealt with separately.

A case has been made out against the concept of profit-sharing and labour participation in management. Profits are the residue which the entrepreneur gets after meeting his cost of production. The objective of the entrepreneur is to maximise profits by the most efficient combination of the various factors of production, including labour. Management has to continue substituting one unit of a factor of production for another, until the most efficient combination is attained. The interests of labour, on the other hand, demand that it secure its rightful share of production which would equal its marginal productivity. The short-term interests of management and labour do not coincide, although in the long run there is some identity of interest. The argument further goes on to maintain that labour participation in management will increase the causes of friction, which would be accentuated on account of the limited horizon and narrow approach of the labour representatives on the management board. Besides, management now requires expert education and experience and these qualities would be hard to find amongst labour representatives in management.

Despite the tenacity of the arguments for and against profit-sharing and labour participation in management, the general trend is to favour the labour view and guarantee it a certain percentage of the profits. Of course, the same purpose could be served by sharing the prosperity of the firm with labour by making bonus payments instead of giving it the name of profit-sharing.

Labour participation in management is a highly delicate problem. A distinction has to be made between management holding consultations with labour on all facets of management, in which labour is directly or indirectly involved, and labour having an effective role in the day-to-day management and long-term planning of the firm. The former deserves a trial and should be encouraged, but the latter course could hardly work even in a developed and educated society let alone an under-developed society just embarking on the road to literacy.

## **Development of Personalized Family Relationship**

The old saying that East and West will never meet may not seem so true today with the progress of science and technology in Asia and Africa, and the new sympathetic attitude to matters of a spiritual and emotional nature in Europe and the North Americas. Yet it should be emphasised that in matters involving human relationships we would have to look for an Eastern approach and find an Oriental solution to the problem of employer-employee relationship, a problem created by the development of the factory system introduced in the West. We are lucky to benefit from the example of Japan where the employer and employees of a firm are one large happy family, sharing alike the ups and downs in the fortunes of the firm. It is regarded as unthinkable for a firm to reduce the labour force when the demand for its products has slowed down. The international recession between 1973 and 1975 left the least human scars in Japan, as compared to any other developed country. It is said that the top executive employees of an automobile manufacturer left these posts to work as salesmen at a lower salary (and voluntarily) in order to secure new orders, and the success of their endeavours resulted in the firm being able to maintain its level of employment. In Japan, the employers protect the interests of their labour force long after retirement and until such time as they meet their Creator. The employees also work loyally and to the best of their ability. The process of consultation and advice and consent permeates all aspects of the firm's processes including production, marketing and sales, improvement in technology, working hours and working conditions, etc., etc. The attitude of the employer to the employee can best be described as that of uncle and nephew. This attitude in the employer-employee relationship has served Japan well for nearly a century, and it can serve us well too if we, Pakistanis, can adapt it to our system.

## **Labour Reforms in Pakistan 1972-75**

The People's Party government of Mr. Zulfikar Ali Bhutto introduced several labour reforms in Pakistan during 1972-75. These reforms have had wide repercussions in improving the economic conditions of labour and providing it with greater security of tenure as well as other direct and ancillary benefits. The labour reforms may be grouped as follows:

### **i. Industrial Relations**

Major reforms have been introduced in the law of Industrial relations in the country. Trade unions have been allowed freedom to work. Restrictions on their registration have been removed.

In order to control the multiplicity of trade unions and to strengthen the position of collective bargaining agents, the following amendments have been made in the existing Industrial Relations Ordinance:—

(a) In an establishment where two registered trade unions already exist, no other union shall be registered unless it has at least 20 members of the total number of workers in the establishment.

(b) A worker shall not be entitled to be member of more than one trade union at a time.

(c) Under Section 25-A of the Industrial Relations Ordinance, either the worker himself or the collective bargaining agent shall be entitled to make representations to the employer and the labour court. Representations through any other union has been disallowed.

(d) Agreement between the collective bargaining agent and the employer, even outside the conciliation proceedings, has been made binding on all workmen as on agreement in the course of conciliation proceedings. Moreover, any agreement between the employer and a union other than the collective bargaining agent has been prohibited in establishments where there exists a collective bargaining agent.

Workers of those factories where 50 or more workers are employed have been allowed participation in management to the extent of 20 per cent at the factory level. Management can take no decision without the advice in writing of the workers' representatives on the Management Committee in the matters of framing of service rules and policy, promotion and discipline, changing physical working conditions in the factory, in-service training of workers, and recreation and welfare facilities. Towards the end of 1975 the scheme regarding workers' participation in management has been made more effective and the new provisions made in this behalf are:—

(a) The scheme now covers factories owned and managed by the Government. Previously Government-managed factories were outside the scope of this provision.

(b) Workers' representation in management committees has been increased from 20 to 50.

(c) Regulation of working hours, preparation of leave schedule and matters relating to the conduct of employees have also been brought within the purview of the workers-management committee.

(d) Joint Management Boards are to be set up at Company level with one-third share for workers on these. Employees representation on these Boards will be from amongst the senior executive and Directors. These Boards will look after the following subjects:—

- (i) improvement in production, productivity and efficiency;
- (ii) fixation of job and piece-rates;
- (iii) planned regrouping or transfer of the employees;
- (iv) laying down the principles of remuneration and introduction of new remuneration methods;
- (v) provision of minimum facilities for workers employed through Contractors where they are not covered by Labour Laws;
- (vi) Joint Management Boards will have the rights to ask for reasonable information concerning the working of the Company.

The provision in the law for audit of accounts of the factories by an Auditor nominated by the collective bargaining agents has been made effective. Now the net profits of a Company for the purpose of assessing workers' share in profits shall be on the basis of a second audit by Auditors approved by the Government, but action in respect of the Workers' share shall not await the second audit which will be used for making any adjustment that may be necessary on this account.

Other amendments are:

(i) The wage ceiling prescribed for coverage under the social security scheme has been raised from Rs. 500 to Rs. 1,000 per month in order to extend the benefits under the scheme to workers drawing wages above Rs. 500 per month.

(ii) Suspension of a worker shall not exceed four weeks except in cases where prior permission of the conciliator or the Labour Court is mandatory.

(iii) Charge-sheets for misconduct must be issued within one month of the date the misconduct comes to the knowledge of the employer. The onus of proving that the misconduct was not previously within the knowledge of the employer will rest with the employer.

(iv) Complaints of contravention of the provisions of the Standing Orders Ordinance shall be made before a Labour Court only.



(v) Authority under the Payment of Wages Act and Commissioner under the Workmen's Compensation Act has been authorised to realise decreed amount itself.

(vi) No appeal shall be entertained under the Payment of Wages Act unless the amount ordered to be recovered is deposited with the authority under the Payment of Wages Act.

(vii) Junior Labour Courts shall be upgraded to full-fledged Labour Courts.

(viii) For the cause of action, a joint application by workers has been allowed to be submitted under Section 25-AA of the Industrial Relations Ordinance before the Labour Courts.

Trade unions have been given legal protection. A trade union officer cannot be transferred during the pendency of a union's application for registration. Similarly, the transfer of an officer of a trade union with a motive to victimise him has been made an unfair labour practice. As a result of the efforts of the Government, trade union formation has increased considerably. At the end of 1974 the number of trade unions were 7,172 with a total membership of 7,41,174.

Several new institutions have been created to promote industrial democracy. The institution of Shop Stewards has been introduced. The institution of Works Council which existed in the form of Workers Committees has been revitalised. A National Industrial Relations Commission has been created to promote the formation of trade unions at national level and to adjudicate industrial disputes relating to industry-wise trade unions of federation of such trade unions. The Commission also registers industry-wise trade unions and deals with cases of unfair labour practices. It is also authorised to determine the Collective Bargaining Unit for large establishments spreading over more than one province on a reference made by the Government or on an application by trade unions.

Steps have also been taken to eliminate the procedural delays. Time limits have been fixed for disposal of matters relating to industrial relations. An application for the registration of a trade union, for instance, must be disposed of within 15 days, a grievance before a Junior Labour Court within seven days and a case before a labour court within 30 days.

## **ii. The West Pakistan Industrial and Commercial Employment (Standing Orders) Ordinance, 1968**

The scope of this law has been extended by making it applicable to the establishments of contractors as well as to the industrial and commercial establishments employing 20 or more workers to whom certain selective benefits like that of bonus, holidays with pay and security of service have been extended.

In the case of profits, a bonus equal to one month's wages or 30 per cent of the profits, whichever is less, shall be given to the workers. This is in addition to the bonus payable under any agreement, settlement or award.

Workers are to be insured for contingencies not covered by the Workmen's Compensation Act, 1923 and Social Security Ordinance, 1965. This includes death (including natural death) and injury outside duty hours. Payment of premia is made by the employer. The amount of life insurance of a worker shall not be less than the amount of compensation payable under the Workmen's Compensation Act, 1923.

Previously, the employers were entitled to lay off their workers in case of fire or natural calamities for upto 14 days and the workers were paid lay-off benefits in such cases. These benefits will now be paid for all kinds and reasons of lay-off and 50 per cent of the wages during the entire period of 14 days, unlike the past when during the first week, half wages and during the second, one-third of the wages were paid.

In the past, gratuity was admissible to permanent workers at the rate of 15 days' wages for every completed year of service. This has now been enhanced to 20 days' wages for every completed year of service. For piece-rate workers, gratuity is to be calculated at the rate of the highest emoluments drawn in a year. In other cases, an average of the last three months' pay is to be taken as wages for the purpose.

Major reforms have been made in the matter of security of service to the workers. The employers previously could terminate the services of any workman after giving notice of one month or pay in lieu thereof. This was sometimes used as a tool for mass victimisation of workers. Unlike the past, employers are now bound to give appointment, transfer or promotion orders to the workers in writing and the services of workmen cannot be terminated nor can they be removed, retrenched, discharged or dismissed from service except by an order in writing which states the reasons for action taken. The Law also provides that no employer shall close down the whole of his establishment without prior permission of the Labour Court.

Previously, the employer used to appoint badli (replacement) workers in place of permanent workers, they were continued in employment on a temporary basis for several months and were denied the benefits available to the permanent workers. It has now been provided that such workers with 3 months' continuous service or 183 days of attendance in a year shall be entitled to the rights and status of a permanent worker. Similarly, protection has also been extended to the construction workers who have to be given preference in employment within one year of the date of their retrenchment and no break in their service shall be counted if they are re-employed within one month from the date of their retrenchment.

### **iii. The Mines Act, 1923**

The Mines Act, 1923, which was painfully out of tune with the times has been amended to reduce the hours of work from 54 in a week to 48, and to provide better health and safety facilities to the miners. It has been made incumbent on every mine-owner to notify cases of occupational diseases to the Inspector of Mines, to maintain safety equipment and first aid rooms of prescribed standards. In some cases, they have also to engage nursing and medical staff with sufficient quantity of medicines and other requisite facilities. Payment of overtime work has been introduced for the first time in mines, at double the rate of ordinary wages.

Annual leave is now allowed with full wages and is calculated at the rate of one every 17 days of work performed below the ground and one for every 20 days of work performed above the ground. In addition, the miners are now entitled to casual leave for 10 days with full wages, medical leave for 16 days on half wages and festival holidays on full wages.

### **iv. Dock Workers**

The Dock Workers (Regulations of Employment) Act was enacted in 1974. It envisages the registration of dock workers so as to ensure greater regularity of employment and efficiency of workers. It guarantees minimum wages to dock workers besides attendance allowance, health cover and measures for their safety.

### **v. The Factories Act**

The Factories Act, 1934 was extended to factories employing 10 or more workers. The provisions relating to health and safety have been streamlined and improved for the benefit of factory workers. Half-yearly medical examination of workers and vaccination and inoculation at the expense of the employer has been made compulsory. Previously there were no such obligations on the employers.

Workers in factories were earlier not entitled to medical leave and annual leave could be granted only for a period of 10 days. The workers employed in factories are now entitled to 14 days' annual leave with pay, 10 days' casual leave with pay, 16 days' sick leave on half pay and festival holidays with pay as allowed to Government employees.

### **vi. The Workmen's Compensation Act**

The Workmen's Compensation Act, 1923, which provides for compensation to workers and their dependants in case of death and injuries caused by accidents arising out of and in the

course of their employment has been extended to workers getting monthly wages upto Rs. 100, including workers employed in a clerical capacity. The rate of compensation have also been substantially enhanced.

### **vii. Employees' Social Security**

A Social Security Scheme covering short-term risks, like sickness, and maternity and employment injury, was introduced in March, 1967, in the then province of West Pakistan under the provisions of the West Pakistan Employees Social Security Ordinance, 1965, covering about 1,00,000 textile workers of Karachi, Hyderabad and Lyallpur. Subsequently, the scheme was extended to other areas covering the employees of industrial and commercial establishments consisting of 19 or more workers. Since its inception up to March 31, 1975, the Scheme has covered about 2.32 lakh (2,32,000) workers in 3,950 establishments in the Punjab, over 1.91 lakh workers in 1,760 establishments in Sind and 26,000 workers in 119 establishments in the North-West Frontier Province.

There are 102 Social Security medical care units in the Punjab, 107 in Sind and 15 in the N.W.F.P. The Sind Social Security Institution has built a 200-bed hospital in Landhi and a 50-bed hospital in Kotri, while it has contractual arrangements with a number of other hospitals. The Punjab and N.W.F.P. Social Security Institutions do not have any hospital of their own but have made arrangements with government and private hospitals and clinics for the treatment of the secured workers. During the current year, a chest clinic was opened in Lahore.

The quantum of benefits under the Social Security Scheme has also been enhanced. The amount of death grant for funeral expenses of a secured person has been raised from Rs. 50 to Rs. 500. Sickness benefits to secured workers have been made payable for 121 days as against 91 days previously. For tuberculosis, this period has been increased to 191 days.

### **viii. Companies Profits (Workers Participation) Act, 1968**

The Act applied to companies engaged in industrial undertakings employing 100 or more workers in a shift. It has now been extended to all industrial undertakings employing 50 or more workers. Workers' share in profits has been raised to 5 per cent of new profits.

### **ix. Workers' Children (Education) Ordinance, 1972**

The Workers' Children (Education) Ordinance, 1972, required the employers of all establishments employing 20 or more workers to pay an education cess at the rate of Rs. 100 per annum to provide free of cost education up to the matriculation standard to one child of every worker employed in the establishments covered under the law. The facility includes supply of textbooks and exemption from admission fee, tuition fee, examination fee and school fund.

### **x. Employees' Old Age Pension Scheme**

The old age benefit scheme for workers will be launched from July, 1976, and a board at the federal level will administer the scheme.

The Board shall include representatives of the employers and employees. It will be financed from the contributions made by the employers, and shall be in addition to the gratuity to which the workers are already entitled. It shall apply to all factories and establishments employing ten or more workers drawing wages upto Rs. 1,000 per mensem.

Every worker shall get Rs. 75/- per month on retirement. In the case of men the retirement age is 55 and for women it is 50 years. It shall also become due if a worker has rendered 15 years of insurable service. The scheme will also be extended in case of invalidity if he (worker) has put in five years of service. Workers who were too old to complete 15 years of employment at the inception of the scheme will also benefit from it, if they have put in seven years of service.

## **xi. Cost of Living Allowance**

Realising that workers and salaried persons are obviously the sufferers in an inflationary situation the Government came out with the Cost of Living (Relief) Act, 1973, providing for the monthly payment of Rs. 35 to all employees throughout the country drawing wages upto Rs. 700 per month with marginal adjustments upto Rs. 735. On the 8th June, 1974, a new cost of living allowance at the rate of 10 per cent of wages, subject to a minimum of Rs. 50 and maximum of Rs. 150/-, to all employees getting monthly wages upto Rs. 1,000 was announced to offset the impact of high prices. In April 1975, another increase of Rs. 25 per month in the cost of living allowance was announced. It was designed to compensate for the increase in the prices of wheat, vegetable ghee and sugar.

## **xii. Labour Courts**

To ensure expeditions disposal of cases, a large number of Labour Courts consisting of a presiding officer were established. Cases of industrial grievances have now to be disposed of by these courts within seven days.

## **xiii. Labour Reaction**

The Labour Reforms enunciated in the preceding paragraphs were intended to redress the grievances of labour and to prevent their exploitation. Labour has, generally speaking, not reacted in a responsible and responsive fashion to these reforms, efficiency of labour has been reduced and labour indiscipline is a little more widespread. It has not yet dawned on labour that the employer-employee relationship is a two-way street, and that for the rights of labour there are also the corresponding obligations of labour. The obligations are just as important as the rights. Labour has in recent years become belligerently political-minded and does not give a second thought before coming out on the streets. The Railway strike and the Bank Employees strike during 1975 are illustrations of this attitude. Employers have been deprived of the right of hiring and dismissal and this has aggravated the labour problem in both the public and the private industrial sectors.

Private investment has dried up and there is a certain amount of stagnation in industrial production. The "carrot and the stick" have to go together and fear continues to be a powerful factor in human motivation. The fear of losing one's job, the fear of being unable to provide adequately for one's family, and the fear of losing the good things of life continue to play a prominent role in ordering our lives in a responsible and productive pattern. Nevertheless, it should be stressed that Pakistan has had a period of relative industrial peace during 1972 to 1975 as compared with most other countries.

## **Provision of Social Services**

Mr. Bhutto's government has made Social Development a key element in its development strategy. It should have favourable repercussions on the efficiency of labour while at the same time attacking the problem of inequality. The attempt of the government is to improve the qualitative content of economic growth through the development of education, health and housing.

## **Education**

Expenditure on Education is regarded as the best investment for the future by eminent Sociologists and Economists like Professor Gunnar Myrdal. Myrdal has made out a very convincing case for education in the context of economic development.

In one of his classics, "Asian Drama", Myrdal says: "Events themselves gave support to the view that education is an important developmental factor, lending further support to the new theory. When W. Leontief found that, as far as international trade was concerned, the

United States specialized in selling labour-intensive rather than capital-intensive products, this invited the explanation that the United States had a greater comparative advantage in the skills possessed by its labour force (including organizational abilities, assumed to be imparted by education) than in its abundance of capital. The Marshall Plan in Western Europe turned out to be a greater and more rapid success than most economists had foreseen, while economic aid to under-developed countries generally proved to be less effective than had been expected. It seemed reasonable to suppose that the accumulated educational capital of the West European countries was a factor in this result. Another influence was the delayed realization that the Soviet Union had made strenuous efforts to increase educational facilities on all levels, and the inference that her rapid emergence from a state of relative underdevelopment was partly attributable to these efforts." Myrdal goes on to say: "While most of the planning in South Asia and the other under-developed regions, and most of the economic literature on development, continues to be based on the notion that physical investment is the engine of development, there are today an increasing number of economists who denounce that view and who regard development, particularly in under-developed countries, as primarily an educational process. The members of this newest school of thought are aware of the fact that they are thereby repudiating the dominant trend of economic thinking about development in under-developed countries as it evolved since the end of the Second World War; before that time there had been little interest in the development issue, particularly in regard to under-developed countries." The treatise of Harlison and Myers on "Education, Manpower, and Economic Growth" has also emphasised education as an investment in human resources. They write: "In spite of the importance attached to investment in man by a number of economists and their efforts to bring it within the realm of economic theory, most economic-development planners usually give only peripheral consideration to the analysis of human resources... When confronted with problems of development which lie beyond the scope of his familiar analytical framework, the economic development planner quite naturally brushes them aside with an expressed recognition of their probable importance and a vague hope that somehow or other they will solve themselves in the course of economic growth."

Pakistan has one of the highest rates of illiteracy in the world. Moreover, previous education policies created a certain imbalance in manpower requirements and actual manpower produced by educational institutions. To meet the above challenge, Education Reforms were announced by the energetic Education Minister, Abdul Hafeez Pirzada on March 15, 1972. The major objectives of the new education policy were:

- (i) Free and universal education upto Class X for all children in a phased programme.
- (ii) Nationalization of privately-managed educational institutions.
- (iii) A shift from general education to more purposeful agro-technical education.
- (iv) Equal access to education for all, with emphasis on less developed areas and education of girls and women.
- (v) Providing financial assistance to talented boys and girls from low income groups.
- (vi) Improvement of science and technical institutions at the college level.
- (vii) Establishing an adequate number of general, engineering and agricultural universities.
- (viii) Establishment of Centres of Excellence and area study centres at the universities.

It was planned to have an annual intake of 9.6 million (96 lakhs) children in primary schools in 1980 thus raising the percentage of students at the primary level from 40 per cent in 1975 to 85 per cent in 1980. The shifting emphasis from higher to primary education reflects the importance given to the achievement of mass literacy.

Education Minister Hafeez Pirzada has very rightly kept the Education Policy under review on a pragmatic and realistic basis so as to accord with the availability of resources and changed circumstances. The Education Policy three years ago in regard to universalisation of education had not been achieved mainly because of the colossal financial requirement on building of new schools and their maintenance. But now a proposal is under consideration to reduce the cost by 50 per cent by using local materials in building work and to minimise the recurring expendi-

ture by utilising the proposed national service on the basis of *quid pro quo*. At present 56 per cent of school-going age children are not receiving education. There are 40 million illiterate adults out of an adult population of some 50 million and they could double their output if literacy was imparted to them. In September, 1975, the Education Policy was modified. The basic characteristics of the changed emphasis are:—

- (i) The Federal Government has decided to halt the expansion of higher education in the country, making it restrictive, selective and qualitative, and concentrate more on the expansion of school education with the aim of making it universal upto primary school level by 1983 for boys and by 1987 for girls and upto middle school level by 1985 for boys and 1990 for girls.
- (ii) It has been decided to revolutionise the content of education at the school level—making it meaningful and in accordance with the needs of the community, and to give the new curriculum an agro-technical basis by 1979 upto the eighth class and by 1981 up to the intermediate level, along with an ideological basis.
- (iii) The Government has also decided to launch a concentrated campaign against adult illiteracy in the country—possibly with the help of a national service cadre.
- (iv) For gifted children, 24 schools have been identified and 25 per cent of the seats in these schools will be reserved for the children of those who could not afford to pay. For the remaining 75 per cent seats the fees will be enhanced further.
- (v) Regarding the malpractices in the examination system, it had been decided to introduce the semester system from Colleges to University level. The examination system will go. Under the semester system, which has already been introduced in six universities, a system of evaluation will be evolved.
- (vi) So far as technical education was concerned, it was felt that already there was sufficient capacity in the country but it was being utilized very poorly. Therefore, now the concentration should be not on its expansion but on its consolidation. For this some of the polytechnics had been upgraded into degree-awarding colleges. It has been decided to put a moratorium on further expansion in this field upto 1980. If any new technology was to be introduced it must be in one of the existing colleges which must now become productive and produce a marketable commodity.
- (vii) No new university will be opened.
- (viii) There are 50 million illiterates in the country. Of them 40 million are able-bodied and could contribute to the country's economy with proper education which will double their output, said the Education Minister. Therefore, it has been decided to launch with the help of provincial Governments a campaign for adult literacy. For this, he added, Literacy Councils both at Federal and Provincial level will be set up.
- (ix) The Government was going to lay special emphasis on training of teachers mostly from the volunteer corps and those who were already in Government service. It will be a modest beginning but within two years there will be considerable increase in this operation.
- (x) Important decisions have also been taken to put an end to indiscipline in educational institutions—both for teachers and students—to check the brain drain of talent from universities and colleges, streamline the functioning of Text Book Boards, put an end to malpractices there, and introduce uniformity at the national level in the curriculum. An academy of teachers is being set up this year by the University Grants Commission at Islamabad.
- (xi) Under uniform rules regular examinations will be implemented by all universities from next year. For classes above class 12 examinations will be held between April and June and the results will be announced by the end of September every year. Since 1947 Pakistan has lost 15 valuable months till today through postponement of examinations.
- (xii) Under the rules educational institutions will be obliged to invite applications for ad-

mission through advertisement which should specify the number of seats available in each department. The date of examination will have to be advertised nine months in advance and the academic year would begin on October 15 every year.

- (xiii) Very soon teachers will not be allowed to go abroad for service, except under State-to-State arrangements.
- (xiv) Another important step being taken by the Government is to eradicate the evil of corrupt practices in examinations. For this purpose a Federal law is being framed to deal with malpractices in examinations. The method of summary proceedings will be adopted under this law.
- (xv) Legislation will be framed making it incumbent for industries to impart practical training to those who qualify from the polytechnic institutions.

## Achievements

An amount of Rs. 4819 million was spent on Education between 1970-75 and physical achievements in the education sector speak for themselves:

	1969-70	1974-75	Percentage increase
i. Number of Primary schools	41,290	50,400	32
ii. Enrolment in " " (in millions)	3.82	4.73	24
iii. Number of High Schools	1,995	2,540	27
iv. Enrolment in " " (in millions)	0.326	0.393	21
v. Number of Polytechnics and Technical Colleges	19	24	26
vi. Annual output of diploma level and intermediate level technicians	2,500	3,600	44
vii. Annual output of graduate engineers	873	1,450	66
viii. Number of Degree Colleges.	135	214	58

It is now for the student community to avail of the substantially enlarged educational facilities made available to them at the cost of the taxpayer. No education policy can create diligent students; it can only assist diligent students. During the last five years students have started taking an active part in political activity to the neglect of their studies. This is indeed a sad state of affairs. It has become the fashion amongst students to be anti-establishment.

Pakistan is one of the very few countries in the world where the student union elections during 1974 and 1975 resulted in spectacular successes for the right-wing religious student organisations. Legitimate and reasonable demands of the students community should be given sympathetic consideration. Student agitation up to a point can be tolerated. Students cannot, however, remain above the law. Transgression of public peace, destruction of property like the burning of vehicles, and assault on and kidnapping of public functionaries should be dealt with firmly and according to law. Students must learn that there is no such thing as an absolute right, and that for every right there is a corresponding liability.

It is expected of the education system to equip students physically and mentally to enable them to secure gainful employment, to think and ponder over things that matter, and to understand the teachings of the Quran and Sunna. The education system should not make robots of human beings; it should teach human beings to be able to become better human beings should they so desire.

## Health

To provide health cover to everybody in rural and urban areas, the Government announced a People's Health Scheme in March, 1972. The scheme envisages an integrated approach to the health problems of the nation by establishing a network of health units in the country, one for every union council area in villages and union committee areas in towns. Each unit will cover a population of about 10,000 (15,000 in the sparsely populated province of Baluchistan and other similar areas in the country) and shall be adequately staffed. Out of every 5 such units the fifth one shall be much larger than others with additional staff and 10 beds. These units will be linked to hospitals located at tehsil talukas and district headquarters. The salient features of the Scheme, in a phased programme, are as under:

- i) Integration of vertical organizations dealing with a particular disease or health problems like malaria eradication, family planning, tuberculosis control, smallpox, etc.
- ii) Health facilities in the rural areas where about 90 per cent of the population lives.
- iii) Expansion and strengthening of tehsil and district hospitals having 60 and 250 beds respectively.
- iv) Improvement in the standards of teaching and practice of indigenous and homoeopathic systems of medicines.
- v) A National Formulary of drugs and medicines by generic names to avoid wastage and duplication and to bring down the cost of drugs and treatment substantially.

As the Scheme's implementation is spread over a period of eight years, it was considered necessary to go ahead with the implementation of those parts of the scheme which would immediately provide better and cheap medical facilities to the masses. With this end in view, two items were taken up namely, (i) sale of drugs by generic names, and (ii) the first phase of the Scheme with the following objectives:

- (a) Increasing the supply of medicines by 3 times in all existing hospitals, dispensaries etc.
- (b) To provide for expansion of medical colleges in the country; and
- (c) Discontinuance of medical reimbursement in respect of Government servants who were being provided all necessary medicines by the hospital dispensaries.

Health facilities in Pakistan have always presented a dismal picture due to numerous factors. The development plans have not succeeded much in improving the situation. The available data indicate that existing public health institutions cater to the needs of hardly 15 per cent of the population. The rest of the population gets medical care from private practitioners, hakims and homoeopaths and minor ailments are treated by themselves. The present Government accorded a high priority to the provision of health facilities and the matter was taken in hand on an urgent basis. However, due to the long time needed for the training of doctors, shortage of training facilities for para-medical staff and the formidable cost of extending hospital facilities, the situation remains far from satisfactory.

At the end of March, 1975, there were 38,835 hospital beds in the country, mostly located in urban areas. The number of doctors present in the country is about 10,000, of nurses 3,000 and lady health visitors about 1,000. **Thus, there is one hospital bed for 1,800, one doctor for 7,000 and one nurse for 23,300 persons.** There are 160 rural health centres in the country and about 400 subcentres of rural health. The rural population has a much lower standard of health facilities, because the majority of the private doctors settle down in towns due to better facilities available in these areas. The problem is further aggravated because the villages are situated at distances from the main arteries of roads and the communication network.

Medical education has witnessed a satisfactory increase in some of the categories. The number of under-graduate medical colleges has increased from 7 to 14, increasing the admission capacity for M.B.B.S. students from 900 to 3,877. It has been decided that admission to medical colleges would be strictly on a merit basis and the small quotas reserved for heads of Provincial Governments have also been abolished.



The Generic Names Scheme has been the subject of public criticism. Its introduction has not brought about any substantial reduction in prices. The pharmaceutical industry in Pakistan had developed on sound and progressive lines and we had a large number of manufacturers of international repute. The quality and price of Pakistan produced drug could compare favourably with any other part of the world. The Generic Names Scheme has encouraged the introduction of spurious and sub-standard drugs and medicines and this has had an adverse effect on the entire field of health. It has also discouraged foreign investment and participation in the Pakistan pharmaceutical industry.

## Housing

In mid-1975 there was a deficit of two million houses in the country bearing in mind the needs of the people. This deficit resulted from the fact that the population in Pakistan is growing at three per cent plus a year. The population in the urban areas is increasing at an estimated rate of six per cent. It means, besides the normal population growth in the urban sector the nearly three per cent increase is attributable to migration from the rural to the urban sector. In order to meet the needs of the increased population in the country, Pakistan requires an additional 150,000 houses annually. As against this, only 35,000 houses are being currently constructed every year—leaving a deficit of 115,000 houses per year. In the rural areas, the problem is of a largely different nature. In the rural sector around two million houses are of a sub-standard type and need to be improved in appearance and comfort by using better materials, as well as the provision of other amenities. One estimate indicates that at present only five per cent of the people in the non-urban sector have the facility of proper drinking water and sewerage system while in larger urban centres, this facility is available up to 35 per cent population but it varies from city to city.

The rapid population growth as well as the migration of people from the rural to urban areas, have intensified the housing shortage.

In the field of housing, the Government with its limited resources confined itself to providing sites and services, leaving actual construction to the private sector. To help the private sector, the capital resources of the House Building Finance Corporation (H.B.F.C.) have been augmented and fiscal incentives have been provided to attract private capital for house construction. In addition to housing, there is a paramount need for safe drinkable water and disposal of sewerage and excreta to prevent diseases caused by impure water and lack of sanitation. Keeping the above requirements in view, the Annual Development Plan 1974-75 provided for the following at a cost of Rs. 728 million as against Rs. 134 million in 1971-72.

- i) Development of 23,200 residential plots and construction of 3,500 nucleus houses/flats for low income groups.
- ii) Allocation of Rs. 100 million to H.B.F.C. to provide loans to a large number of low and middle income families.
- iii) The availability of electricity and gas to lower-income households.
- iv) Stepping-up the programme for providing water supply and sanitation in both urban and rural areas and initiating a hand-pump installation programme in areas affected by the 1973 floods.
- v) Revising water and sewerage charges to make the urban programme financially viable.
- vi) Construction of model villages and undertaking pilot programmes for village improvement.
- vii) Construction of people's waiting halls and improvement of subordinate courts in a phased programme.

The public sector programmes in the social welfare sector include rural and urban community development projects, family and child welfare, youth welfare, professional and financial assistance to the voluntary social welfare agencies, medical social work, social work training and research, etc. In addition the Government has been encouraging the private sector to initiate needed social

services with the active assistance of the Government on an aided self-help basis. The social reforms of the present Government during the last three years aimed at structural changes in the society and accordingly prescribed altogether a new strategy for social welfare. Administrative rearrangements have been under way and steps are being taken to effect greater coordination between various Government Departments and agencies and the social welfare sector.

In order to encourage women to become productive citizens, more than 2,000 vocational training centres have been established under the auspices of the Federal and the Provincial Governments.

## Manpower and Employment

Pakistan has a civilian labour force of about 20 million persons out of a total population of 70 million. Every year approximately 6 million persons enter the labour force, thus adding to the numbers seeking employment. According to the Labour Force Survey of 1971-72, 57 per cent of the labour force is engaged in agriculture, 12 per cent in large and small-scale industry and 10 per cent in trade. With the structural change in the economy, the proportion in the agriculture sector has been gradually declining and is expected to decline further. This shift, apart from higher wages in industry, is dictated by the heavy pressure on land—36.2 million acres of cultivated land supporting about 11 million persons.

Unemployment rates have been estimated variously between 10 per cent to 30 per cent of the labour force if under-employment is taken into account. Generally, unemployment is more common in the urban areas while under-employment and seasonal unemployment prevails in the rural areas.

To overcome the shortcomings of past planning, Government decided that greater employment must be treated as a primary goal of economic development. Besides the formulation of a long-term employment strategy to achieve a higher employment level, the Government decided to launch some special programmes which may have immediate effect in raising the participation rate of labour force and improving the employment situation.

A detailed and realistic evaluation of these employment-oriented programmes, is yet to be made to assess the results achieved so far. A cursory review of these programmes reveals that they have decidedly helped in tackling the problem of unemployment. The following programmes are being implemented in the country at present:

(a) **People's Works Programme.**—The essence of the programme is to mobilise the people in rural areas at village level and in urban areas at mohalla level to undertake productive projects that will help build up the economy and provide for basic amenities. The programme will mobilise local resources to motivate people for a massive productive effort, and provide opportunities for constructive leadership to draw upon local initiative to the maximum extent, and inculcate a sense of confidence and self-reliance among the masses through training and skill formation. The details of this programme are given in Chapter 4 of this book.

(b) **National Development Volunteers Programme (NDVP).** The National Development Volunteers Programme was launched in 1973 with the specific purpose of making job opportunities available to the educated unemployed, particularly scientists, engineers and technicians both in private and public organisations as volunteers and thus to enable them to get on-the-job training. The programme has achieved some success. The employing institutions are utilizing the talent of the young technicians while degree and diploma-holders are placed in a working environment so that their academic knowledge is polished and developed into professional skills. These volunteers are allowed stipends by the Government for specified period, keeping in view their educational qualifications, while in certain cases in the private sector the amount is shared by the Government and the employer.

(c) **Integrated Rural Development Programme.** The Integrated Rural Development Programme aims at improving the standard of living in the rural areas and to help keep the rural-urban migration under some check by establishing agro-based industries around villages. Details of the programme and its achievements are given in the Chapter on Rural Development.

(d) **Agrovilles Programme.** Agrovilles are small rural-cum-urban Centres (Markaz) located

in rural areas with basic facilities similar to those available in the cities and serve as focal points for the availability of agricultural services, marketing of agricultural products, supply of essential consumer goods and development of agro-based industries, by providing employment opportunities for the people near their places of residence it helps to slow down the large-scale migration to cities and to ease the problems being faced in urban areas at present.

To meet the shortage of skilled manpower in the country, the Government of Pakistan in collaboration with ILO has embarked upon a programme of skill development by establishing three different projects under a phased programme. Phase I of the programme consisted of the setting up of the West Pakistan Institute of Management; phase II related to the Instructor and Technical Training Centre and phase III comprised Vocational Training, Planning and Apprenticeship.

The Manpower Division has recently conducted a training course on "Educated Unemployed" with the assistance of the Asian Regional Team for Employment Promotion located at Bangkok which is a regional programme of the ILO (International Labour Organisation) and the UNDP (United Nations Development Programme). The Manpower Division was created by the Government of Pakistan in 1973 to cover research on development and utilisation of human resources in the context of overall economic development.

The functions of the Manpower Division are:

- i) To evolve and determine manpower policies concerned with recruitment, training, use and conservation of manpower resources in cooperation with major agencies concerned with the production and utilisation of manpower.
- ii) To produce short-term and long-range operational programmes for the development and utilisation of manpower.
- iii) To prepare manpower plans at the national and provincial levels for incorporation in annual, five-year and perspective plans.
- iv) To undertake a continuous review of the manpower situation in various sectors of the economy, identify the imbalances in manpower supply and demand relationships and recommend adjustments and remedial actions by concerned agencies.
- v) To develop basic data and statistics for sound manpower planning on a continuing basis and to promote comprehensive research and studies.

The labour problem is indeed the most challenging of all socio-economic problems, and threatens the very basis of our value-system if it cannot be satisfactorily resolved. The challenge of providing full employment and getting rid of under-employment is massive enough for any country or any type of economy. This problem is further compounded by the problems of inequality and social justice and the necessity for establishing a just and meaningful relationship between the employer and the employees.

## Indicators of Social Development

A comparison of certain indicators of social development in some Asian countries is of interest in judging their relative backwardness. The figures are the latest ones available in an April, 1975, Asian Development Bank publication.

Name of country	Life expectancy	Infant mortality (per 1,000 live births)	Persons per physician	Primary students as % of 15-19 age group	Secondary students as % of 15-19 age group	Literacy rate	Daily newspapers 1,000 (copies per persons)
Afghanistan	37.5	190	18,655	12	7	8	6
Bangladesh	47	135	7,545	28	22	22	NA
Burma	47.5	25	8,975	43	17	60	10

India	41.2	118	4,795	79	28	29	16
Indonesia	47.5	140	25,847	77	15	56	7
Malaysia	65.3	39	4,774	89	29	61	63
Nepal	40.6	162	51,086	15	9	9	3
Pakistan	51.3	113	9,014	25	31	17	5
Philippines	56	62	9,096	72	71	83	21
Singapore	68.2	19	1,451	90	40	72	190
Sri Lanka	61.7	50	6,475	58	73	75	42
Thailand	56.2	24	7,971	830	13	70	24

# Interest

## Definition of Gross and Net Interest

Interest is in effect the price paid for the use of Capital. Now capital has a money value and is created as the result of expenditure of money. Hence interest can be defined as the price paid for the use of money for a certain time. Interest is expressed as a rate or percentage interest rate paid for the use of capital or money. Mrs. Joan Robinson has expressed the whole concept in very simple terms:

"The essence of a transaction involving interest is that one man parts with money in return for a loan from another man. The lender acquires a piece of paper representing his right to repayment, and the borrower acquires the immediate use of the money. The borrower must make some payment to the lender, over and above the eventual repayment of the sum borrowed, for if he did not do so the lender (apart from philanthropy) would have no motive for parting with control over his money, and for undergoing the risk that the borrower (through willing or mere bad luck) may default when repayment is due. This extra payment is the interest on the loan. The motive of the borrower is that he can use the money to acquire capital goods of which he expects to earn at least as much as the interest which has to pay (or, in the case of private borrowing, because he needs money now more than he expects to need it in the future). The motive of the lender is to receive interest. All transactions involving interest, whether it takes the form of an agreed sum or a share in profits can be reduced in terms of this simple pattern."

We have to distinguish between simple interest and compound interest. Simple interest is calculated on the original sum, the principal, but not on any interest earned by it. Compound interest is calculated on the original sum invested or lent plus the accumulated interest.

A distinction should also be made between gross interest and net interest, also called Pure Interest or True Interest. Net interest is the payment for the actual use of money capital; it does not contain any element of payment for risk, etc. If the elements of payment for risk, etc. are added to net interest, we arrive at the gross interest. Gross interest is made up of the following elements:

- i. Pure interest.
- ii. Insurance against risk involved in the lending operation.
- iii. Cost of management of the investment or debt service, such as the keeping of accounts. etc.
- iv. Return for the inconvenience of parting with liquid resources for a period of time and thus losing the opportunity of investing those resources in more worthwhile ventures during this period.

The rates of interest charged by various lenders to different borrowers may vary quite substantially. The actual rate of interest charged is a matter of negotiation between the borrower and the lender. The agreed rate of interest depends on the social and financial standing of the borrower, including his creditworthiness, the value to the bank of the borrower's account, including his business relationship with the bank, the size (and maturity period for which the funds are borrowed) of the loan, the nature of the security pledged for the loan, the size of the bank, nature of the centre in which the bank is located and the area of the country where it is located, and the nature of the banking structure in the country. All these reasons would explain why private money-lenders and pawn-brokers charge a high rate of interest, while gov-

ernments with sound financial traditions can borrow at much lower rates. In fact the interest on government securities is a reasonably good example of pure interest.

## Justification for Payment of Interest

Why should interest be paid and what is the justification for paying it? The answer to these questions may be found in the following Theories of Interest:

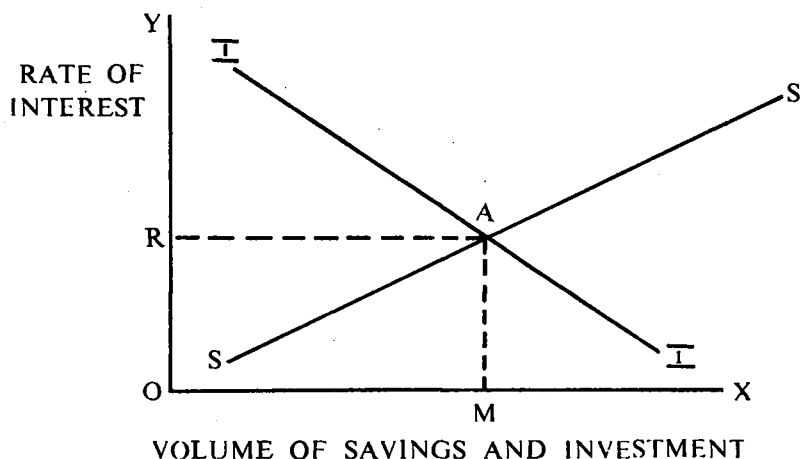
- i) **The Productivity Theory** attempts to explain interest as a payment for capital because production with the aid of capital was greater than without it. But productivity alone is not a sufficient explanation of interest. The marginal productivity of capital has to be higher than the rate of interest; no one will borrow if marginal productivity of capital is less than the rate of interest. Interest is more in the nature of cost for every entrepreneur. Even if there are some lenders who are prepared to lend competition would ensure that funds are lent to those prepared to pay interest. Thus it is **scarcity** rather than **productivity** which explains interest.
- ii) **The Abstinence or Waiting Theory** explains interest from the supply side, as against the Productivity Theory which attempts to explain it from the demand side. Senior maintained that saving involved sacrifice or abstinence and was an act of abstaining from consumption. This abstinence was rewarded in the form of payment of interest. Marshall refined Senior's concept of "abstinence" by changing it to "waiting", since, it was argued that savings by rich people did not involve any sacrifice. Marshall's concept of "waiting" implied that savings do not preclude consumption for all time to come but merely postpone consumption for some time. The reward for this period of "waiting" is the rate of interest.
- iii) **The AGIO Theory and the Theory of the Austrian School** explains interest as a premium paid for the immediate possession of goods or money, which otherwise could only be had at some time in the future. The immediate possession of goods or money is agreed to because it will increase the profitability of some activity, or because present enjoyment is preferred to future possible enjoyment. This theory is based on the premise that people are optimistic about their future and expect to be better off than they are now.
- iv) **The Keynesian Liquidity Preference Theory** emphasises that interest is the reward for individuals keeping their funds in illiquid assets. Some people prefer to keep their savings in a completely liquid form, that is, cash. Others are prepared to accept a degree of illiquidity, that is, to invest their savings. The latter implies reward to the investor, and this reward is generally greater, the more illiquid the investment. Thus according to Lord Keynes, interest is the reward for surrendering the liquidity of savings. He suggests that the reasons favouring liquidity preference are the transactions motive, precautionary motive and speculative motive.

## Determination of Rate of Interest

Since interest is, in effect, the price paid for the use of capital or money for a period of time, the rate of interest is determined by the interaction between the forces of the supply of and demand for money. The Classical Theory, Loanable Funds Theory, and the Keynesian Liquidity Preference Theory explain the determination of the rate of interest using the demand and supply analysis.

**The Classical Theory of Interest** states that the rate of interest is determined by the demand for savings to invest and the supply of savings. The demand for capital goods arises because they are required to produce consumer goods, and like any other factor of production, they enjoy marginal productivity. Marginal productivity of capital would be the additional production resulting from the employment of an additional unit of capital, the other factors of production remaining constant. Under perfect competition, the firm can go on purchasing the various factors

of production until such time as the marginal productivity is equal to prices. Thus the entrepreneur will demand capital goods (which is the same as demanding savings which can be invested) up to the point at which the expected net return on the investment of capital goods equals the rate of interest. In other words, the entrepreneur will keep on investing capital upto the point where the marginal productivity of capital equals the rate of interest. The demand for capital will thus be higher at a lower rate of interest and lower at a higher rate of interest. According to the Classical Theory, on the supply side the money which is to be used for purchasing capital goods comes from those who save from their current income because they are induced to do so by being offered interest as a reward for "waiting" and overcoming their time-preference for immediate enjoyment.



The rate of interest will be determined by the interaction of the forces of the demand for capital (demand for savings to invest in capital goods) and the supply of savings, the former being represented by I.I. and the latter by S.S. The demand and supply curves intersect at A, and this is the point of equilibrium at which OR is the rate of interest and OM the volume of investment and savings. At every other rate of interest, either demand will exceed supply or vice versa.

The criticism of the Classical Theory of Interest is largely based on the acceptance of Keynes's General Theory of Employment, Interest and Money. First is the assumption of the Classical Theory that if there is a full employment of resources, more capital can be produced by putting these idle resources to work instead of withdrawing resources from consumption. Secondly, an increase in savings by curtailing consumption will, in turn, reduce demand, thus reducing the incentive to produce (that is, invest). Thirdly, by assuming full employment, the Classical Theory neglects changes in the income level. According to Keynes the equality between savings and investment is brought about by changes in the level of income and not by changes in the rate of interest. Fourthly, the Classical Theory ignores the effect of changes in investment on savings, while, as explained by Keynes, a fall in investment results in a fall in income and, therefore, a fall in savings.

**The Loanable Funds Theory of Interest** maintains that interest is the price paid for the use of loanable funds, and that the rate of interest is determined by the interaction of the demand for funds available for lending and their supply.

The demand for loanable funds is determined by the opportunities for capital formation and the desire to increase cash holdings. More specifically the demand for loanable funds comes from investment, consumption, and hoarding in the form of idle cash balances.

The supply of loanable funds comes from savings, dishoarding, disinvestment, and bank credit (which can be based on creation of new money supply).

As in the Classical Theory, the rate of interest will be the point at which the curve representing the demand for loanable funds intersects the curve representing the supply of loanable funds.

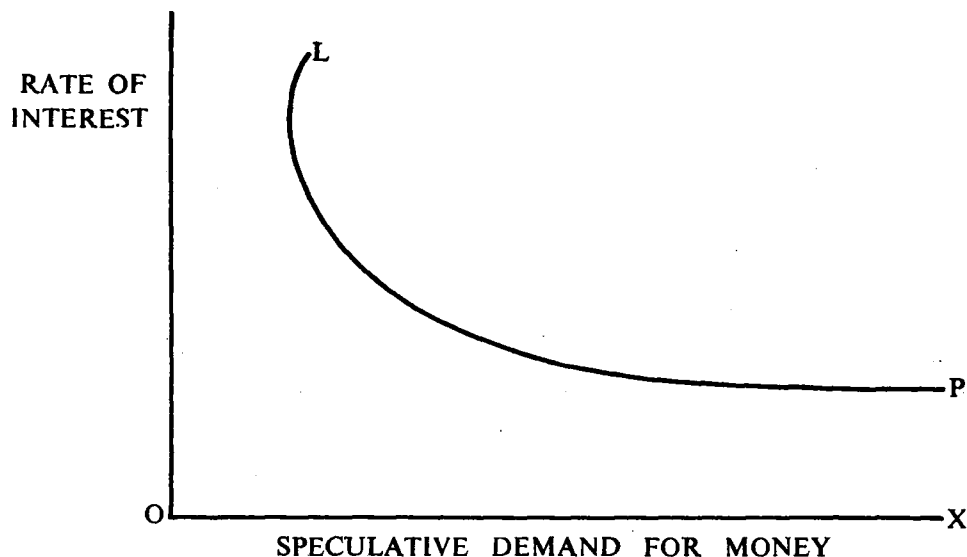
The criticism of the Classical Theory is equally applicable to the loanable Funds Theory. The basic difference between the two theories lies in the composition of their respective supply sides. The elements composing the supply side of the Loanable Funds Theory are more comprehensive than those of the Classical Theory.

**Keynes's Theory of Interest or Liquidity Preference Theory of Interest** brings a fresh and more realistic approach to the factors determining the rate of interest. In his brilliant book, "General Theory of Employment, Interest and Money" published in 1936, Lord Keynes states that "interest is the reward for parting with liquidity for a specified period."

A person has to decide what part of his income he will consume and what part he will save; the former depends on his propensity to consume. Having decided what part of his income should be saved, he has to decide how much of this he should keep in the form of ready money (cash or demand deposit in a bank) and how much he should part with and lend. How much this person keeps in the form of ready cash is his liquidity preference. Liquidity preference thus signifies the desire of the public to hold cash or demand deposits which are readily convertible into cash.

The liquidity preference of an individual (the liquidity preference of the public is the sum total of that of individuals) depends on:—

- i) **Transactions motive.** This relates to the need for ready money for current personal and business transactions. Ready money is held to bridge the gap between the receipt of income and its expenditure.
- ii) **Precautionary motive** relates to the need for keeping ready money for a rainy day and to meet unforeseen contingencies such as sickness, accidents and unemployment.
- iii) **Speculative motive** relates to the desire to keep resources in a liquid form to take advantage of the changes in the rate of interest (i.e. the price of securities.)



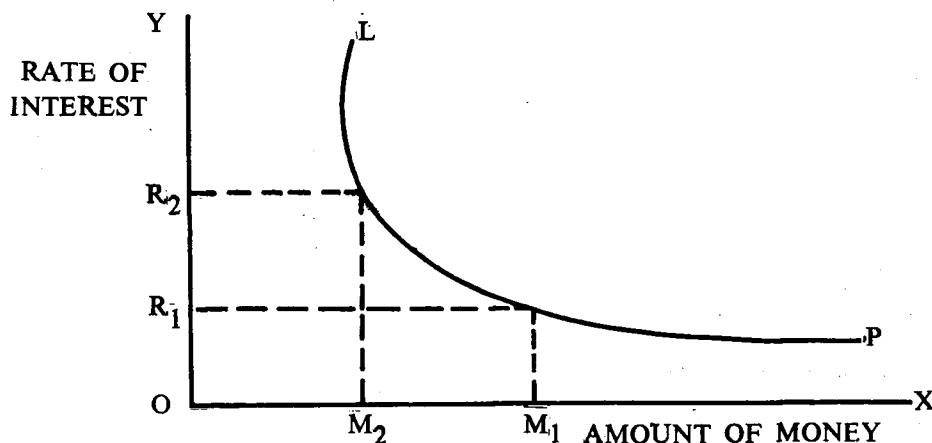
LP represents the liquidity preference curve. The demand for ready money is high when the rate of interest is low and relatively less when the rate of interest is higher. People hold larger



sums in the form of ready money when they expect the rate of interest to rise, thereby making interest-bearing securities cheaper. If a one hundred rupee bond was issued at 5%, and thereafter the rate of interest rose to 10%, the market price of this bond would be reduced to fifty rupees.

The supply of money is measured by the amount of notes and coins in circulation plus the demand deposits in commercial banks (these are as good as cash since they can be converted into cash or demand). The supply of money can be influenced by the Central Bank through open market operations and changes in the bank rate (these matters are discussed in the chapter on Money and Banking).

According to Keynes, the demand for money for speculative purposes in the form of liquidity preference and the supply of money available for speculative purposes determine the rate of interest.



If LP is the liquidity preference curve, the rate of interest will be  $OR_1$  when the supply of money is  $OM_1$ . If the supply of money is reduced to  $OM_2$  the rate of interest will rise to  $OR_2$ .

The Keynesian Theory of Interest has certain limitations. First, like the Classical Theory and the Loanable Funds Theory, it is indeterminate. It is not possible to separate the speculative demand for money from the demand for it on account of the transaction and precautionary motives. It is also not possible to determine what portion of the supply of money is earmarked for speculative purposes. Secondly, Keynes does not give adequate consideration to the roles of productivity of capital and thriftiness in the determination of interest rates. The cash balances of modern enterprises are considerably influenced by the requirements of savings to finance capital investment. The rate of interest is also by no means independent of the demand for investment funds.

Professor Alvin Hansen, who died in mid-1975 and who did much to popularise Keynesian Economics in the USA has well remarked that the Classical Theory, Loanable Funds Theory and the Liquidity Preference Theory taken together supply us with an adequate theory of the rate of interest. To quote Hansen once again, a determinate theory of interest is based on the investment-demand function, the savings function (or conversely the consumption function), the liquidity preference function, and the quantity of money.

### Role of Interest

The role of interest has been the subject-matter of much debate, particularly in Muslim countries founded on the ideology of Islam, such as Pakistan. "RIBA" or interest is forbidden

by Islam, but there are wide-ranging differences in the interpretation of what constitutes "RIBA".

As interest is forbidden only on those loans which are for consumption purposes or for meeting some calamity or contingency, how does the rate of interest charged constitute a severe hardship on the borrower? Or is the concept of RIBA much wider and also covers loans for productive and business purposes? Cannot the interest on loans extended for industrial and business purposes be classified as profit-sharing and not as RIBA because there is an element of risk involved in every venture? Can we expand the scope of bonus for productive purposes to cover loans for the purchase of durable consumer goods like houses and cars when it is more economic to own them rather than hire them? These and many other pertinent questions on the role of interest in a Muslim society need to be examined and studied in detail. Meanwhile interest will continue to play a significant part in the economic life of the country.

Interest encourages savings and a higher rate of interest attracts greater savings (including those from sources foreign to the country).

A high rate of interest discourages investment by increasing the cost of sharing capital. To the extent that lower investment means lower incomes, and lower incomes result in lower savings, a high rate of interest also has a dampening effect on savings; conversely a low rate of interest encourages investment, and, therefore, ultimately improves the rate of savings.

The rate of interest functions as the capital allocating machinery of the economic system. Scarce capital resources are divided up amongst potential users, according to the urgency of their requirement, that is, the marginal productivity of the capital they are seeking to utilise.

Users with a higher marginal productivity of capital can bid up the price they are prepared to pay (that is, a higher rate of interest) and secure a larger share of the available capital as compared to those with a relatively lower marginal productivity of capital who cannot afford to pay a rate of interest which is higher than their marginal productivity. Thus scarce capital resources are distributed according to their respective efficiency or productivity.

It should be mentioned that although, theoretically speaking, the long-term response of the demand for money to changes in the rate of interest should be very elastic, many studies, which measure a shorter-term response, have shown a very inelastic demand curve.

The prices of moveable as well as immovable property are generally amortised in terms of the rate of interest. Thus if a house secures an income of 10,000 rupees per year and the rate of interest is 10 per cent per annum, the price of the house would be 100,000 rupees. If the rate of interest falls to 5%, the price of the house would increase to 200,000 rupees. An increase in the rate of interest depresses the prices of property, shares and securities, while a decline in the interest rate increases their price.

The points enumerated in preceding paragraphs should be considered along with those relating to the justification for the payment of interest when evaluating the role of interest in the economy.

## Zero Rate of Interest

In mid-1975 the concept of zero rate of interest cannot be dismissed lightly on account of three recent significant developments: Switzerland, the bastion of monetary capitalism, is charging a certain percentage on all new accounts opened in Swiss Banks; this goes much further than a zero rate of interest. Saudi Arabia is advancing substantial loans which do not carry any interest to friendly Muslim countries like Pakistan. Lastly, the International Islamic Bank, with headquarters at Jeddah, is going to advance loans without any interest.

It is interesting to note that the economic development under some sort of a capitalistic order contains within itself the seeds for a downward trend in the rate of interest, and this trend could well magnify to a stage when the rate of interest becomes zero, or even negative (that is, people have to pay a service charge for securing Bank facilities of deposit and withdrawal). Economic progress connotes increase in production, rise in the standard of living, higher level of money incomes, increased demand for capital goods, increased investment, a further in-

crease in income and a further increase in savings. This ultimately results in massive surpluses of production over consumption; banking and insurance institutions provide absolutely safe channels of investment; the advances in education and efficiency and the provision of social services on an expanding scale combined with greater security of life and property increase the ability to save. The cumulative effect of all these advances can well be that the supply of capital resources is much more than the demand for them, thus causing a short reduction in the rate of interest and, possibly, even its complete elimination. This scenario is not based on fantasy or drawn from fiction. It depicts stage by stage a rational evolution to the point of zero rate of interest. Such a scenario can also be supported by using the marginal productivity theory of capital. With economic progress the desire to invest increases and hoarding is discouraged. The increase in the supply of capital reduces the marginal productivity of capital and thus the rate of interest falls. Depending on the increase in the supply of capital, this process could continue till the rate of interest drops to zero. Can we not in the latter half of the 20th Century, visualise a day in the not very distant future when there will be no dearth of capital to oil the wheels of an economy which can sustain a happy consumer and leisure-oriented society? Probably, with God's help, yes!



# Profit

## Definition of Gross Profit and Net Profit

Profit is the difference between the total expenses involved in producing or buying something and the total revenue accruing from its sale. Profit is the reward of Organisation, which is a key factor of production. The entrepreneur earns profit for his diligent and wise management; he can also incur a loss and thus have to pay for the mistake of management or errors of judgement. Profit is the residue left after meeting the cost of all the other factors of production; it is equal to the selling price of output minus the cost price or cost of inputs (both fixed and variable).

Profit is generally related to the amount of capital used and is expressed as a percentage of the capital; normally the accounting period is one year. Profit can also be stated as the proportion by which the price unit sold was greater than the cost, that is, as a rate on the turnover.

A distinction must be made between **gross profit** and **net profit**.

**Gross profit** is the difference between the total revenue (i.e., total receipts from sales) and the payments made for the various factors of production and inputs, including rent of land, wages of labour, and interest on capital. Gross profit includes a number of elements which have to be deducted in order to arrive at the figure of net profit. The following elements should be deducted from gross profit to calculate the net profit:

- i) Interest on the entrepreneur's own capital,
- ii) rent of land owned by the management, and
- iii) the entrepreneur's personal wages for management and supervision.

The above-mentioned elements should be deducted from gross profit to arrive at net profit since they are absolutely necessary for the production prices and would have to be obtained from elsewhere at a price if the entrepreneur did not himself provide them. These payments should be regarded as any other input and deducted from gross profit to arrive at the net profit.

**Net Profit** is the reward or compensation to the entrepreneur for risk-taking or enterprise; for his ability as a superior bargainer with landlords, labour, capitalists, suppliers of raw material and spare parts, consumers, etc. for securing monopoly gains at the expense of other factors of production and the consumer; for the exercise of good judgement and a measure of good luck in making windfall profits or abnormal profits. Normal profits are generally regarded as the minimum expectation of profits which will induce an entrepreneur to undertake the risks of production or business. Abnormal or windfall profits may be the result of unforeseen circumstances or of a sound judgement which could anticipate favourable conditions in the future. Net profit is the residual reward received by the entrepreneur after all payments for all the inputs have been made. Net profit or pure profit is thus the reward of the entrepreneur for risk-taking, good management in the form of superior bargaining skill, and sound judgement.

## Theories of Profit

**Wage Theory of Profit:** According to the wage theory, there is close kinship between wages and profits. The socialist view is that profits are simply a deduction from the wages of labour, and they are not justified because they are earned at the expense of labour. Professor Taussig, on the other hand, regards profits as a particular kind of wages. This theory is not valid because of the fundamental differences between wages and profits. Profits are essentially a reward for risk-bearing and uncertainty while wages are fixed and the labour does not bear any

inherent risk. Secondly, there is a much greater element of chance in profits while wages are earned income which is not subject to chance. Lastly, under imperfect competition wages tend to be depressed while profits tend to swell.

**The Marginal Productivity Theory of Profit** is partially applicable to profits as marginal productivity expresses a relationship between scarcity and demand. The demand for entrepreneurs of exceptional ability is always much larger than their supply. The greater the scarcity of such entrepreneurs, the higher the profits. Forces of competition tend to equalise the profits of employees of equal ability. A valid criticism of this theory is that the marginal productivity of an entrepreneur is rather difficult to measure since the entrepreneur performs a complex and sophisticated set of functions and the element of uncertainty cannot be standardised.

**The Dynamic Theory of Profit** explains profits because we live in a dynamic and not in a static world. In a static society everything is known and can be ascertained; there is, therefore, no risk and no uncertainty and hence no profit beyond for the routine work of coordination and supervision. Ours is, however, a dynamic world, and the entrepreneur has to foresee changes in demand for the end-product and in the supply of inputs as also the effect of possible innovations and changes in technology on his business. Professor Knight has criticised this theory on the ground that "if the law of change is known, as in fact is largely the case, no profits can arise; change may cause a situation out of which profit will be made if it brings about ignorance of the future." Thus it is uncertainty, and not necessarily change, which is the cause of profit.

**The Risk-bearing Theory of Profit** explains profit as the reward for the risks and responsibilities inherent in every enterprise. The greater the risk in the enterprise, the higher must be the expected profit to induce people to undertake that business. There are, generally speaking, three kinds of risks:

- i) Replacement or depreciation can be calculated and is counted as a cost of production.
- ii) Physical risks like fire, floods, accidents, etc., can be insured against and their cost is part of the cost of production.
- iii) Obsolescence on account of some unforeseen circumstance, such as an abrupt change in consumer preference or innovation in the technology of production, risk of marketability of the product and uncertainty are charges against profit.

Some Economists, like Carver, have argued that profits arise not because risks are borne, but because superior entrepreneurs are able to reduce them. It appears quite uncontroversial that a substantial part of the net profit is the reward for risk-bearing.

**The Uncertainty-Bearing Theory of Profit** has been forcefully argued by Professor Knight, who emphasises that uncertainty-bearing rather than risk-taking is the function of the entrepreneur for which his reward is profit. Certain foreseen risks can be provided for and their burden is borne by insurance companies. The genuine economic risks—risks of the marketability of the product due to changes in demand and the risks from the adverse effect of technological change on the production process—cannot be foreseen and are unpredictable.

Knight calls these risks uncertainty; the term risk is applied to those dangers which can be known and foreseen. It should be emphasised that it is the combination of uncertainty-bearing and capital which brings a reward in the form of profits. Capital alone is lifeless and uncertainty-bearing without capital has no practical significance. The combination of capital and risk-bearing is relatively rare, and this would account for the presence of profits.

The uncertainty theory has been criticised on two grounds:

- i) Uncertainty is not the only factor limiting the supply of entrepreneurs. There are other factors such as shortage of funds, lack of knowledge and opportunities, and the presence of friction between management and labour which limit the supply of entrepreneurs.
- ii) The entrepreneur has functions other than that of uncertainty-bearing. These include initiating the project, coordinating its multifarious aspects, and bargaining with the other factors of production.

By and large, the uncertainty Theory of Profit appears to be the more acceptable one as is agreed in subsequent paragraphs dealing with the functions of profit.

## Maximisation of Profits

The object of every entrepreneur is to maximise his profits by selling his products at the highest price the market will accept, and, at the same time, reducing his cost of production through the use of the most efficient combination of inputs. The entrepreneur is in business to make profit and is hardly motivated by philanthropic considerations. The only limitations governing this aspect of entrepreneurial activity are the laws of the land, accepted social customs and traditions, and the behaviour of the market in which he operates.

It would not be fair to assert that the goal of maximisation of profits is diametrically opposed to that of giving labour and the consumer a fair deal. As far as labour is concerned, a wise entrepreneur (and he will not be in business for long if he is not wise) will give labour adequate real wages which will reflect its marginal efficiency. The growth of social awareness is another potent factor which should not permit the economic exploitation of labour.

The consumer, too, cannot be exploited for long even in monopolistic and imperfect markets, although here a case can be built for governmental supervision and intervention, if and when necessary. In a competitive market the question of consumer exploitation does not arise. It would, in this context, be well to recall the position of equilibrium of the firm in which profits are maximised:

- i) Under perfect competition profits of the firm are maximised under marginal cost price.
- ii) Under monopoly, profits of the firm are maximised when marginal revenue is equal to marginal cost, which is lower than price.
- iii) Under imperfect competition, in the short run, profits are maximised at the same point as in the case of monopoly. In the long run, the equilibrium position is that at which  $\text{Marginal Revenue} = \text{Marginal cost} = \text{Price}$ .

## Function of Profit

The primary function of profit is to induce entrepreneurs to undertake business and industrial ventures and bear the risks and uncertainty inherent in every enterprise in order to earn an adequate reward, which is termed as profit. Price or net profit is the reward of an entrepreneur for reducing the element of risk in a venture and for successfully overcoming the uncertainties of market and technological innovation inherent in every business. In short, profit is the reward of Organization for being efficient all round, not only in initiating, supervising and co-ordinating business activity but also in accurately judging future marketability of its products and the availability of its inputs. The dynamism of economic forces tests the vitality and ability of even the wisest of entrepreneurs.

There are three social functions which are also performed by the profit-making process. First, successful enterprise should, from a social point of view, cover the losses of the unsuccessful ones. This can be likened to prospecting for oil, where one productive hole has to pay for one or more dry holes which were dug in vain. Secondly, profits from successful ventures are quite heavily taxed and thus bear the cost of defence, civil administration, and social services like education, health, old age pensions and maternity benefits. Thirdly, profits are a primary source of capital requirement for investment, both in the public as well as the private sector. This investment creates new productive capacity as well as urgently needed balancing and modernisation of existing capacity.

Profit is a necessity in any type of economy; capitalistic, socialistic, or mixed. Every enterprise, be it in the private sector or in the public sector, has to keep in view its profitability. Profits are an accurate measure of efficiency. The concept of profit takes an added significance in the light of recent emphasis on accountability. Another vital function of profit is that the rate of profit in various economic sectors is an indicator of the direction in which the resources

of the community should be invested. Businesses or industries enjoying high rates of profit should attract greater investment, and this would in turn result in an optimum allocation of resources. Those centrally planned economic systems that ignore this principle of allocation of resources do so at their own peril and do not distribute scarce resources to the maximum advantage. Thus, in real life the philosophy of profit is completely different to that attributed to it by John Ruskin in the following words: "Thou shalt hate the Lord thy God, damn his laws, and covet thy neighbour's goods."



# Money, Banking and Income Determinants

## Meaning and Functions of Money

Money is what money does. By common consent, money is anything which serves as a means of exchange, a medium in which prices are measured, and a measure of wealth. Walker has defined money extremely well as: "that which passes freely from hand to hand in full payment for goods, in final discharge of indebtedness, being accepted equally without reference to the character or the credit of the person tendering it and without the intention on the part of the person receiving it himself to consume or enjoy or otherwise use it than by passing it sooner or later in exchange."

R.G. Hawtrey has aptly remarked: "Money is one of those concepts which, like a teaspoon or an umbrella, but unlike an earthquake or a buttercup, are definable primarily by the use or the purpose which they serve." The functions of money can be summed up in the following lines:

"Money is a matter of functions four:

A medium, a measure, a standard and a store," or more simply as a means of payment for goods and services and also for the discharge of debts and other contracts. In the absence of money such payments would have to be made through barter. Barter transactions raise several difficulties. One of them is the difficulty of the indivisibility of certain goods and services. The other serious problem is that of finding somebody who wishes to exchange your commodity (say, a cow) with one which you may want in return (say, a horse). The coincidence of the desire for exchange and the indivisibility of goods and services are serious obstacles in the operation of barter transactions.

The second function of money is to serve as a **measure of value**. Money makes it easy to compare the values of different goods and services. It serves as a measure of value, a unit of account, a common demonstrator of value in which accounts are kept, costs calculated and prices stated. A barter economy suffers from the services handicap of not having a common measure of value in terms of which other values can be expressed and accounts kept.

Money also serves as a **standard of deferred payments**. Money acts as the basis for credit transactions, so that the exact obligation of a future payment is readily available. This makes both lending and borrowing less risky and stimulates economic activity.

Fourthly, money serves as a **store of value**. It has ready purchasing power and is the only completely liquid asset which can be used for any purpose at any time.

Money can take many forms. The principal forms of money now are coins, notes and credit instruments. Coins are no longer made of precious metals. Paper money or notes is the most widely used form of money. Credit instruments, like cheques and commercial bills, comprise the larger part of the money in use, although they are not legal tender; legal tender is any form of money which must be accepted as payment of any obligation stated in monetary terms. A commercial bill is a written instruction by the person drawing it (drawer) to another (drawee) to pay a particular sum either to the bearer of the bill or to the order of a specified person (the payee).

## Characteristics of Good Money

Money, in order to function efficiently, should have certain attributes. The qualities of good money are general acceptability, portability, cognisability, homogeneity, divisibility, durability and stability.

Money must be **generally acceptable** otherwise it cannot serve as money satisfactorily. Money should also be **easily portable**; it should have large value in small bulk so that it can be conveniently carried and handled. It should also be **cognisable**, or easily recognised. Money should also be of uniform quality or **homogeneous**. It should be **divisible** in smaller parts without loss of value so that it can use bulk in the smallest transactions. Money should be **durable** and not perishable. otherwise it cannot be stored and will lose value after some time. Finally, money should be **stable in value** so that it can serve as a standard for measuring other values. Instability in the value of money can have grave consequences for the economy of the country and it will also detract from the value of money.

### Gresham's Law of Money

Gresham's Law of Money states that "bad money drives good money out of circulation." Queen Elizabeth wanted to reform the currency debased by her father Henry VIII and she was puzzled by the fact that the new coins put into circulation just disappeared. Sir Thomas Gresham explained this phenomenon by expounding the law which bears his name. Good money or new full-valued coins of standard weight and fineness disappeared because they were either hoarded, or melted, or exported. Bad money, which consisted of debased and worn-out coins, was of less value and continued in circulation. Thus bad money drove good money out of circulation. Gresham's Law operates only when "good" and "bad" money circulate side by side. Gresham's Law will not operate if there is a shortage of money, or if "bad" money is not acceptable to the public in which case it will have to be withdrawn.

### Quantity Theory of Money

The Quantity Theory of Money relates prices to changes in the supply of money. If  $M$  is the amount of money and  $V$  the velocity of circulation of money (that is, the speed with which it changes hands in a given period of time), the quantity of money will be measured by  $M + V = MV$ . If we also take into account bank deposits ( $M_1$ ) and their velocity of circulation ( $V_1$ ), then the quantity of money will be  $MV + M_1 \times V_1 = MV + M_1 V_1$ . Now, assume that the average level of prices is  $P$  and the total number of transactions is  $T$ , the value of all the transactions will be  $P \times T = PT$ . The Quantity Theory of Money states that since a given quantity of money exists for use as a medium of exchange and is sufficient to effect a certain volume of transactions at a certain level of prices, then an increase in the quantity of money will force up the price level for those transactions, other things remaining the same.

Thus  $MV + M_1 V_1 = PT$ ,  $PT$  being the number of transactions multiplied by the average price and  $MV + M_1 V_1$  representing the quantity of money. Any change in  $M$ ,  $M_1$ ,  $V$  or  $V_1$  will directly affect  $P$ , if  $T$  is constant. The Quantity Theory of Money was enunciated in the 17th Century but it has been refined in its present form by Fisher. This theory emphasises the crucial role of money supply in determining the level of prices.

The Quantity Theory of Money should be applied with care in the case of small or short-term fluctuations because it is possible for a change in one element to be offset by a contrary movement in another; for instance, an increase in the quantity of money may be hoarded so that the velocity of circulation falls and there is no net effect on  $P$  (prices). Again if there are under-utilized resources (unemployed factors of production), an increase in  $M$ ,  $M_1$ ,  $V$  or  $V_1$  may increase the level of production, thus using more resources and increasing the number of transactions ( $T$ ) without increasing the price level ( $P$ ).

### Effect of Changes in the Value of Money

The value of money is reflected by its purchasing power, that is, the amount of goods and services which it can command in exchange. The value of money is related inversely to the general level of prices. When prices rise, the value of money falls and it is said to depreciate. When prices fall, the value of money rises and it is said to appreciate. When prices do not change, the value of money is said to be stable.

Changes in the value of money are measured through the use of weighted index numbers. This device shows relative changes in the value of money with reference to the group or class which one may like to study, such as cost of living of industrial workers, or index of wholesale prices. Illustratively let us consider the index of wholesale prices by groups prepared by the Statistical Division of the Pakistan Government.

The first step is the choice of the base year, which in this case is 1959-60. The second step is to choose the commodities and to assign them the right weightage. The Statistical Division has chosen four groups: food; raw materials; fuel, lighting and lubricants; and manufactures. Prices are then taken for the base year and put at 100.

The prices for the period with which it is desired to effect a comparison are then collected and tabulated as a percentage of the base year price. The final step is to take the average of the numbers thus obtained. These averages will be higher or lower than 100 according as the general price level has increased (in which case the value of money would have decreased) or decreased (in which case the value of money would have increased).

*Index of Wholesale Prices by Groups*  
(1959-60=100)

Year (July-June)	Food	Raw Material	Fuel, Lighting and Lubricants	Manufactures	General
1959-60	100	100	100	100	100
1963-64	104.56	112.39	103.98	107.05	106.35
1968-69	134.04	113.19	127.37	129.75	129.54
1971-72	153.50	136.34	136.34	150.63	150.31
1972-73	189.05	157.81	157.81	182.20	179.74
1973-74	250.62	202.34	202.34	201.29	229.37
1974-75	293.17	227.43	297.28	284.23	280.85

Thus it would appear that the value of money in 1974-75 was about one-third of that in 1959-60 and about one-half of that in 1971-72. Again, raw material prices which account for a substantial part of rural incomes rose much less than of food, fuel and manufactures.

Changes in the value of money affect various groups of people in different ways. Consumers gain when prices fall and lose when prices rise. Producers generally gain when prices rise, because the cost of quite a few items that enter the cost of production do not increase as fast or as much as the increase in the price of the end-product.

Profits, which measure the difference between sales and cost of production, generally increase during a period of rising prices and decrease during a period of falling prices. Traders and wholesalers gain in a period of rising prices since, generally speaking, retail prices rise more than wholesale prices. Creditors gain and debtors rise when prices are rising since the value of the money repaid is less than the value of the money originally borrowed; if prices fall the situation is the reverse. Labour will be affected by changes in the level of prices if such changes affect the level of employment adversely, and if such changes are not reflected in changes in the level of wages. For instance, higher prices may reduce the effective demand for a particular product; in turn this would reduce its production and thereby reduce the employment level in that industry. The position of labour would be further aggravated if the increase in prices, which in turn increased the cost of living, was not accompanied by a compensatory increase in wages. Fixed income groups, particularly old age pensioners and widows, suffer when prices rise and gain when prices fall.

**Excessive increase in prices (or inflation) can lead to disastrous results on the economy of a country. It can also lead to a widespread social and political upheaval.**

Inflation leads to grave distributive injustice. Some prices rise more than others. Fixed income groups, particularly the most needy elements of society, suffer depreciation. Savings are

destroyed. In the initial stages profits rise, but their real value is much lower, and ultimately the element of uncertainty in the cost of production and selling price destroys enterprise. Besides the militant demands of labour for higher wages have to be met, and these add to the cost of production; the end result is a loss to the entrepreneur.

Wages do not generally keep pace with price increases. The result is labour strife, causing strikes and breaks in the production process. This further reduces the supply of goods, thus raising prices even higher.

As inflation proceeds, people hoard goods instead of money. Loss of confidence in the value of money implies greater exchange of money for goods, and this further fuels the inflationary spiral.

Price control and rationing of essential goods inevitably leads to black-marketing and reduction in their production, as people move to producing those goods whose prices are not controlled. This results in the distortion of the pattern of production by diverting resources to the production of less essential items. The consumer is no longer fully sovereign in the sense of dictating the pattern of production.

Inflation encourages the diversion of surplus resources away from desirable investment channels and into speculative ventures like the purchase of gold, lands and buildings.

Inflation can lead to a devaluation of the currency, thus making imports dearer and exports cheaper. Devaluation, however acts as a further spur to inflation. Exports increase and this may well happen at the expense of domestic consumption. The prices of imported capital equipment, industrial raw material and spare parts increase at least by the extent to which the currency devalued. The local currency liability for foreign debts (both principal and interest) increases as does the expenditure on other invisibles, including freight, insurance, imported defence equipment, maintenance of foreign missions, etc. All this adds to the inflationary pressures. Devaluation can only help those countries which can increase production and exports to an extent which is much more than the extent of devaluation. This kind of situation generally requires a huge national industrial base and the presence of advanced technology.

History is full of instances where a consistent and rapid decline in the value of money has resulted in a socio-political revolution which destroyed the very system of the national economy and its government and in their place established a totalitarian and authoritarian regime.

## Commercial Banks

Commercial banks undertake normal banking business, such as changing cash for bank deposits and bank deposits for cash, transferring bank deposits from one person or firm to another, giving bank deposits in exchange for bills of exchange and secured or unsecured promises to repay (there are bank advances and loans), and financing of internal and external trade. Commercial banks which confine their operations to financing international trade are also called exchange hands.

It is a truism that banks borrow to lend. Bank borrowing takes the form of fixed deposits, savings account deposits, and current account deposits (which can be cashed or transferred without any restriction). The liabilities of banks are money and their assets are partly money and partly near money. The banks borrow short and lend long, in other words, these liabilities mature earlier than their loans. The interest banks pay on these liabilities is, therefore, less than what they receive on their loans. Commercial banks, in order to remain in business, have to work at a profit, otherwise in the long run they could become bankrupt. Nowadays the State Bank, which is the Central Bank of the country, steps in to prevent the bankruptcy of a commercial bank in order to maintain public confidence in the banking system.

Commercial banks also serve a number of miscellaneous functions, such as executor and trustee services, provision of safe deposit vaults, purchase and sale of shares and securities, and paying and receiving payment of bills on behalf of their customers. The provision of an acceptable standard of customer service is now an essential characteristic of commercial banking in view of the keen competition to obtain deposits.

## Creation of Credit

Commercial banks play an active role in the **creation of credit**. The ability of the banks to create credit arises from the fact that they only keep a certain percentage of the deposits as reserves. All the depositors do not come to withdraw their deposits simultaneously. Some withdraw while others deposit, and, generally speaking, deposits are more than withdrawals. This enables the bank to create a vast credit structure with a relatively small reserve.

Banks are able to create credit by advancing loans through an overdraft or on a cash credit basis, and by purchasing securities and bills of exchange and paying for them with its own cheque which in all likelihood is deposited in that very bank. The actual process of credit creation by the banks can be illustrated quite simply. Suppose the deposits of the bank increase by one million rupees on which it must pay interest. In order to make a profit, after paying for the interest and administrative services, the bank should be able to lend it to people at interest. But all this amount is not actually paid to borrowers. A part is kept to meet its obligations to the depositors who may demand cash in lieu of their cheques.

The experience of a banker can indicate **the percentage of total liabilities (that is deposits) which should be kept as a cash reserve in order to provide the liquidity for meeting current obligations**. This percentage is generally low in the developed countries but higher in under-developed countries, where the banking vault has not taken firm roots. Thus, if cash reserves of the order of 20 per cent have to be kept to meet the demands of depositors, an increase in bank deposits of 1 million rupees would permit the bank to increase advances and loans by 4 million rupees. The bank would have additional total liabilities of 5 million rupees although it has only an additional 1 million rupees in cash. The second way of creating credit is by the bank buying securities and bills of exchange and paying for them through deposit receipts rather than by cash. This provides an added base for advancing loans.

Commercial banks cannot keep on creating credit indefinitely. The most severe limitation arises from their obligation to meet the demands of the depositors. Other limitations are legal obligations for maintaining certain parts of their deposits in certain ways, such as cash deposits in the Central Bank and investment in low-interest bearing government securities.

A bank has to remain liquid. **Liquidity means capacity to produce cash on demand for deposits**. A bank has to conduct its business in a manner which ensures that it retains sufficient liquidity. The efficiency of bank depends on its ability to maintain liquidity at a low cost. The retention of cash reserves brings no income and the greater the difficulty of the bank in converting these assets into cash the larger the income. There is an inherent conflict between the requirements of liquidity and those of earning profit. Inter-bank loans on call, short-term financing, upto three months, and investments in Government securities can be readily converted into cash, and therefore, earn less as compared to other loans and advances. The profitability of a bank is essential for maintaining liquidity, otherwise its capital assets will run down. The balance-sheet of a commercial bank generally reads as under (the assets are written in descending order of liquidity and ascending order of profitability):

### LIABILITIES

- i. Capital
- ii. Reserve fund
- iii. Demand deposits
- iv. Savings deposits
- v. Fixed deposits
- vi. Acceptances for customers  
(as per contra)

### ASSETS

- i. Cash
- ii. Cash at Central Bank
- iii. Inter-bank loans at call
- iv. Other loans at call
- v. Bills of exchange discounted
- vi. Investments
- vii. Liability of customers for acceptance  
(as per contra)
- viii. Short and medium term loans and advances.

- ix. Long term loans and advances
- x. Furniture & fittings.
- xi. Office premises & other property.

The above analysis makes it clear that commercial banks can create credit, and therefore money, and that the only limitations to their power to create credit are statutory regulations and the requirements of liquidity. Any one commercial bank can possibly lose the credit which it creates to other commercial banks. The commercial banking system as a whole, however, is a powerful force for creating monetary resources.

Commercial banks are presently characterised by branch banking on a large scale. Unit banking is mostly confined to the subsidiaries of foreign banks, or commercial banks with a large number of branches which have to maintain lesser liquidity, for one branch can draw on another, or in the ultimate analysis on the head office. Large-scale branch banking enjoys the advantages of division of labour and those relating to large-scale production. It is also cheaper to effect remittances from the branch of a bank to another. Branch banking also enables spreading the risks of business geographically. Normally all parts of the country do not suffer economic hardship at the same time; thus losses from branches in a depressed area can be offset against income from banks in more prosperous areas. The unit system of banking has the advantage of providing a personalised service, in the light of the peculiarly localised market conditions and direct personal knowledge of the status and future prospects of the customer. These requisites can be met by branch banking by appointing branch managers who are perceptive, social and endowed with a sense of proportion and responsibility. The branch manager can always pass the bulk to the head office, if he cannot meet all the demands of an important customer.

### Bank's Clearing House

It is necessary to record the role of a clearing house while discussing commercial banking. The transfer of bank deposits from one branch of a bank to another is a simple matter and the transaction is internal to the bank concerned. The transfer of deposits from one bank to another is made through the **Bankers' Clearing House**, where once or twice a day the net liability of every commercial bank to other commercial banks is calculated by offsetting total withdrawals made on it against the total deposits made. This net liability is then paid by cheque by the debtor commercial bank to its creditor commercial banks. It will be observed that for the banking system as a whole this entire process is a monetary transfer having no significance as any decline in the deposits of one or more banks is equally balanced by an increase in the deposits of the other banks.

Commercial banks are quite rigidly controlled by the Central Bank. In the case of under-developed countries, commercial banks merely implement the policies laid down by the Central Bank. The Central Bank's authority to control the cash ratio of the banks is a powerful instrument of control within which commercial banks must operate.

### Nationalization

The nationalisation of commercial banks makes them an adjunct of government, and this matter is a subject of some controversy. The **advantages and disadvantages of nationalising commercial banks** are listed as follows and the reader can make up his or her own mind on this subject.

#### ADVANTAGES OF NATIONALISATION

1. It will bring a large revenue to the Government on a regular basis.
2. There would be greater capital formation

#### DISADVANTAGES OF NATIONALISATION

- (1) The payment of just and adequate compensation to shareholders will involve a large sum of money.
- (2) Even without nationalising all commercial

and more effective mobilisation of savings as Government ownership would inspire greater confidence and attract deposits from private hoarding by offering better security.

3. There would be a more desirable distribution of credit from the point of view of a co-ordinated economic policy.

4. It would prevent concentration of wealth and economic power in a few hands.

5. It would prevent the creation and sustaining of cartels.

6. Banking malpractices such as advances to directors, friends and relations, and evils like tax evasion and evasion of foreign exchange regulations would be avoided.

7. The profit motive will be replaced by the service motive and this is primarily a socialist concept.

8. The wastage of resources involved in competition and duplicating and triplicating of facilities would be reduced.

9. Government would acquire tremendous power over the money and capital markets.

10. Commercial banks create credit, and creation of money supply should not be left in private hands.

On the whole, the success or otherwise of nationalisation of banks would depend on whether the zeal and enthusiasm, dedication, initiative and breadth of vision of the new management can compare favourably with that of the dispossessed owners. Government which would appoint the higher management, would have to take a cold-blooded and completely objective view in making these selections, and, once having made the selection, ensuring that the new management have sufficient autonomy to discharge their functions efficiently. Banks cannot be run as a government department nor can bank officials be treated like permanent functionaries. Bank officials can also hardly behave like Government officials. Nationalised commercial banks have the dual role of performing an absolutely essential economic service at a reasonable and acceptable price, as well as reducing the conflict between what Pigeon described as private net welfare and social net welfare.

## Co-operative Banks

Co-operative banks owed their development in Pakistan to government sponsorship and did not emanate from below, as in the case of the developed world. Co-operative banks extend loans to individuals as well as co-operative societies and they were initially intended to rescue the farmer from the clutches of the money-lender. It is unfortunate that most co-operative banks

banks, government controls a substantial banking sector, including the Central Bank. The control of the Central Bank over the commercial banks is quite extensive and rigid.

(3) Nationalisation will create a state monopoly tied down by bureaucratic procedures and red-tape. It would do away with a highly individualistic, personalised and decentralised process of lending.

(4) Political and not economic considerations will govern the granting of bank advances.

(5) Corruption is rampant in the lower 'and middle levels of governments' public dealing departments and nationalised banks will open yet another venue for organised corruption.

(6) The absence of healthy competition amongst various banks will lead to a marked decline in the quality of banking service.

(7) Black money will no longer find its way into the banking system. It will be diverted to less desirable channels where it will accumulate and again seek investment in even less desirable channels. And so the cycle will go on.

(8) The absence of the profit motive will impair the efficiency of banking and service costs will rise. Government would also have a vested interest in keeping the rates of lending artificially high.

in Pakistan style themselves as such to avail themselves of the privileges granted by the Government to co-operative societies, which include exemption from any control by the Controller of Capital Issues, income-tax concessions, exemption from payment of stamp duties, facilities provided by the State Bank, including special treatment for scheduling purposes, and freedom in dealing with public money.

During the past 10 years steps have been taken to improve the working of the co-operative banks. Directors have been prohibited from borrowing from the banks. Their personnel have been trained. The strengthening of their share capital and reserves as well as the strong measures taken to effect recoveries of outstanding loans has improved their credit/deposit ratio and their deposit/investment ratio. The success of the co-operative movement in Pakistan is problematic on account of the highly individualistic nature of the farmer. It would indeed be a pleasant surprise to observe cooperative banking making a marked impression on the Pakistan economy.

## Central Bank

The Central Bank stands at the apex of the country's banking structure. It occupies a central position in the banking system of a country in the sense that it functions as a banker to the government and to other banks; as the manager of the currency and credit policy of the country; and as the controller of the import and export of money and precious metals. Central Banks are now invariably state-owned, and those that are not are under government supervision.

Central Banks are different from commercial banks because: (i) Central Banks are governed by people who are quite close to other organs of government; (ii) they do not aim to maximise profit but are more concerned with the monetary aspects of sound economic management; and (iii) by virtue of their special relationship with commercial banks they are enabled to influence them in implementing government's policies. Although central banks are part and parcel of the government machinery, great stress has been laid, traditionally and indeed properly, on their "independence." The need to coordinate and integrate the central bank's policy with the general economic policy of the government has been accepted by all concerned, yet the position of a central bank is rather unique in relation to government. In the words of an eminent Governor of the Bank of England, the central bank "has the unique right to offer advice and to press such advice even to the point of nagging; but always, of course, subject to the supreme authority of the government."

The functions of the central bank with regard to Bank rate and creation of money supply are dealt with in subsequent sections. A better idea of the working of central banks would follow from the section on the State Bank of Pakistan. In this section the main functions of the Central Bank may be enumerated as follows:—

- i. It is a note-issuing agency.
- ii. It is a banker to the State.
- iii. It is the banker's bank.
- iv. It is a lender in the last resort.
- v. It controls money supply.
- vi. It controls bank credit directly as well as indirectly.
- vii. It tries to maintain the internal value of the currency (that is, the price level).
- viii. It tries to improve the external value of the currency (that is, the rate of exchange).
- ix. It is responsible for exchange control regulations.
- x. It adopts anti-inflationary or anti-recessionary measures as warranted by economic conditions.
- xi. It assists economic development, particularly in the development of international trade, industry and agriculture.
- xii. It advises government on major economic issues.



## Bank Rate

The Bank Rate is the official minimum rate at which the Central Bank will discount first class bills. As a banker to the commercial banks and as a lender in the last resort, the Central Bank lends money at a certain rate of interest per annum, and this rate is referred to as the Bank Rate. The Bank Rate is the main instrument to control the price of credit, and thus the volume of credit and the monetary situation in general.

The Bank Rate influences all other rates of interest, including those charged by commercial banks on loans and overdrafts. Commercial banks generally charge interest at 1 to 4 per cent above the Bank Rate, depending on the customer and the nature and purpose of the loan. Thus when the Bank Rate is raised borrowing becomes more expensive, demand for loans falls, business activity is reduced, and the general level of real income should decline. Conversely, when the Bank Rate is lowered, borrowing becomes cheaper, an expansion of credit is encouraged and there is every likelihood of increased demands for loans for investment; unless, of course, there is loss of business confidence for other considerations, business activity increases, and the general level of real income should increase. Low bank rates involve a net outflow of capital while high bank rates encourage an inflow of capital; this, of course, could only happen if there were no restriction on the international flow of capital.

Keynes did not advocate extensive use of the Bank Rate as an instrument of policy. He favoured the use of open market operations to control the supply of money (discussed in a subsequent section) and direct State expenditure on investment and public works to overcome a recession. The Bank Rate continues to be a useful instrument of policy, and it does influence investment in capital goods and in stocks of goods and inventories. It should, however, be remembered that the effects of changes in the Bank Rate are not simple, and it cannot always be a reliable instrument of control. For example, it is difficult to forecast the effect of, say, a 1 per cent increase or decrease in the Bank Rate. Changes in the bank rate are, however, symbolic of the determination of the government to take unpleasant steps to remedy the malaise, be it inflation or recession.

After World War II, the "economic miracle" of West Germany and Japan was attributed to labour discipline, non-interference by government, and a cheap and easy money policy. The banking system, led by the Central Bank, was a powerful factor in the tremendous growth achieved by the Japanese and German economies in the post-war world. In the U.K. the Bank Rate remained at 2 per cent between 1932 and 1951, except for a temporary increase in 1939. Ever since it has risen to 8 per cent in 1968 and 9 per cent in mid-1975. In Pakistan we started with a Bank Rate of 3 per cent in 1948 and this continued till 1959 when it rose to 4 per cent. Borrowers did not resist the rise in the Bank Rate and demand for loans continued to be active. The Bank Rate in mid-1975 at 9 per cent, was an all-time high; commercial banks advanced money at the rate of 13 per cent. It is not correct to say as is often said, that as long as money is available the entrepreneur's decisions largely remain unaffected by the level of the rate of interest because profit margins are high and interest is only a small part of the cost of production. There can be no doubt that a number of lines of economic activity are indeed affected by the rate of interest, particularly housing purchase of durable consumer goods, including motor cars and refrigerators, capital intensive undertakings, and those enterprises which require the carrying of large stocks of industrial raw material and spare parts. In Pakistan the Bank Rate does not have a major effect on credit expansion because, first, the State Bank does not lower the market value of government securities in line with the increase in the rate of interest; and, secondly, the extension of State Bank financing to the government sector adds to the reserve base of the banking system and neutralises the effect of the higher bank rate.

## Money supply and its creation

Money supply, in economic terminology, is calculated by adding together the quantity of coins and notes in circulation and the demand deposits of scheduled banks. These resources

represent an immediate demand which could be made on the resources available in a country. It is argued that monetary assets, which also include fixed deposits (that is time liabilities), post office savings bank deposits and deposits of non-scheduled and cooperative banks as well as other deposits with the Central Bank, are a better and more refined estimation of money supply as they take into account the totality of monetary demand that could be made on the country's resources. For our purposes it would be better to adhere to the definition of money supply being limited to coins and notes in circulation plus demand deposits of scheduled banks.

The table below, showing the increase in money supply and monetary assets in Pakistan, illustrates the increase in liquidity since 1962.

(Millions of rupees)

Month and Year	Currency in circulation	Demand Liabilities of scheduled banks	Money supply	Total monetary assets
June 1962	3865	2190	6055	8120
June 1971	5374	6759	12133	20193
March 1975	11,767	11,952	23,719	35,782

Source: Pakistan Economic Survey, 1974-75.

There is a distinct co-relationship between changes in money supply and changes in consumer prices. This is illustrated by the following Table:

Name of Country	Percentage change in money supply (1970 = 100)			Percentage change in consumer prices (1970 = 100)		
	1970-72 average	1973	1974	1970-72	1973	1974
Afghanistan	4.6	17.6	14.4	23	14.6	7.8
Bangladesh	13.8	43.4	17.3	10.2	49.6	39.1
Burma	8.3	27.2	14.5	4.8	30.2	25.2
India	12.9	15.7	15.1	4.1	7.7	21.2
Indonesia	37.8	41	40.5	5.4	31.2	40.4
Malaysia	15.6	37.6	8.6	2.4	10.6	17.3
Nepal	5.1	18.4	26.1	3.1	11.4	16.5
Pakistan	13.2	24.5	8.9	4.9	20.6	28.6
Philippines	16	19.9	25.4	12.4	11	34.4
Singapore	20.9	10.3	8.6	2	17.7	22.3
Sri Lanka	12	12	6	4.5	9.7	12.3
Thailand	12.8	20.6	2.1	3	11.8	23.3

Source: Asian Development Bank publication of April, 1975.

Obviously, money supply can be increased or decreased by affecting the amount of money in circulation and/or the demand deposits of scheduled banks. Demonetisation of currency (that is withdrawal from circulation of certain specified currency and declaring it not to be legal tender after a specified date) and the printing of paper currency suffer from grave and serious disadvantages, apart from destroying confidence in the currency. The Central Bank operates on money supply through affecting changes in the demand deposits of scheduled banks. These are called **open market operations** and consist in the buying and selling of securities on the open market by the Central Bank for the purpose of decreasing or increasing the volume of credit. The sale of securities by the Central Bank absorbs funds and its purchase of securities releases funds to the money market.

The mechanism of open market operations is a rather indirect but quite an effective method. When the Central Bank sells securities, it receives payment in the form of a cheque drawn on one of the commercial banks. The cash balance of the bank in question with the Central Bank is reduced, and with the reduction of its cash balances the commercial bank has to reduce its loans. Thus credit and money supply are contracted. When the Central Bank purchases securities, it pays through cheques drawn on itself. This increases the cash balances of commercial banks with the Central Bank and enables them to increase their loans and advances. Thus credit and money supply are increased.

In Pakistan, most of the larger sales and purchases of government securities by the State Bank have been on the initiative of institutional investors and the desire to market government securities. Open market operations in Pakistan are limited to government securities and are undertaken by the State Bank directly with banks and other institutional investors. As in the case of the Bank Rate, the sphere of the State Bank's open market operations is limited by its desire to maintain stability in the prices of securities. Again, the effect of open market operations is sometimes neutralised by borrowing from the State Bank and thus retaining the same level of bank credit.

## **Keynesian General Theory of Employment, Interest and Money**

John Maynard Keynes (1883-1946), who was raised to the Peerage, affected a complete renovation and reformulation of established economic thinking with the publication of his theoretical framework set out in the "General Theory of Employment, Interest and Money" published in 1936.

The earlier schools of economic thought proceeded on the assumption that economic systems tended to produce full employment of given resources. Keynes rejected this assumption and explained the close and intricate relationship between income, consumption, savings and investment and their effect on the levels of employment.

Keynesian Economics was the beginning of Macro-economics, which has as its main concern the theory of employment or income. It should be remembered that Macro-economics deals with broad aggregates of economic entities (such as total production, consumption, employment, income, general price level, etc.) and is not concerned with the detailed workings of the economy which is investigated by Micro-economics. Micro-economics deals with the study of particular cases, such as the best output for a firm, unemployment in the engineering industry, the supply of wheat, etc. The dividing line between Macro and Micro-economics is, however, rather a thin one for both can be the cause and effect of either one. In this section on the Keynesian Theory we are going to limit our analysis to national aggregates: national income, national consumption, national savings and national investment, and their combined effect on national employment. Before proceeding to explain the Keynesian Theory it would be well to briefly discuss the earlier doctrines as also the concept of full employment.

It all started with Adam Smith, 200 years ago, when he published "The Wealth of Nations" in 1776. This treatise contained the first full description of a free economy in which "the drives of millions of people for personal profit, competing against each other in an unfettered market, would produce universal opulence which extends itself to the lowest ranks of the people." In Adam Smith's view, the main motivation for economic activity is: "the uniform, constant and uninterrupted effort of every man to better his condition"—in other words, self-interest. Only self-interest drives man to produce goods for the needs of society and Adam Smith expressed this thought rather beautifully.

"It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest."

Profit is the reflation of self-interest and produces the marvel of the self-regulating market. In fact, capitalism's whole spirit of growth through adaptation to ceaseless change in prices, profits, technology and consumer taste is traceable to Adam Smith's efforts "to explain why and how the natural instincts and capabilities of free men cause economies to change and pro-

gress." If consumers are free to spend their income and entrepreneurs are free to compete for their favour, then labour and capital will flow "naturally" to the uses where they are most needed, the need being expressed in a higher price for the end-product and a higher profit for its producer. As more firms enter this line of business, supply will increase prices will fall, and profits will be reduced. The entrepreneurs seeking only his own profit is thus "led by an invisible hand to promote an end which was no part of his intention"; the end, of course, is the common good.

Adam Smith enthroned the consumer and not the businessman. He advocated *laissez-faire*, which implied that government should not regulate trade, should cease all intervention in the market and let free competition do its job. Two hundred years ago Adam Smith could hardly visualise a monopoly which did not enjoy governmental support nor could he foresee the tremendous power and clout of organised labour and the giant corporations. The general acceptance of Adam Smith's theories in the Western World led to entrepreneurs accumulating and re-investing capital on an unbelievable scale. Production increased by leaps and bounds, despite the fact that towards the end of the 18th Century the Western World was still in the Middle Ages in most material conditions of life. Population also increased rapidly to devour the food and industrial goods produced "naturally" through the "operation of the invisible hand." It is true, that during this period labour was thoroughly exploited and some capitalists accumulated huge family fortunes partly through proving Adam Smith wrong in thinking that an unregulated market could not be monopolised. Before leaving Adam Smith's contribution to Macro-economics, it would be well to recall some of his home truths:

- (i) Great labour, either of mind or of body, continued for several days together, requires to be relieved by some indulgence, sometimes of ease only, but sometimes too of dissipation and diversion. If it is not complied with, the consequences are often dangerous, and sometimes fatal.
- ii) Fear is in almost all cases a wretched instrument of government, and ought in particular never to be employed against any order of men who have the smallest pretensions to independency. To attempt to terrify them, serves only to irritate their bad humour, and to confirm them in an opposition which more gentle usage might easily induce them to lay aside.
- iii) What can be added to the happiness of a man who is in health, who is out of debt, and has a clear conscience?"

Karl Marx charged capitalism with being an inhuman system in which "all that is holy is professed", and which tries to "mutilate the labourer into a fragment of a man, degrade him to the level of an appendage of a machine". Although Marx and Engels acknowledged that capitalism had "created more massive and more colossal productive forces than have all preceding generations together", yet Marx prophesied that "Capitalist production besets, with the inexorability of a law of Nature, its own negation." According to Marx, Capitalism would produce more goods than workers could buy with the low wages paid to them. Marx went on to theorise that wages might rise in a period of expansion, but that increase would be at the expense of profits, leaving capitalists with too little investment money to keep the boom going, and the economic machine would falter into a slump. The bigger capitalists would then take this opportunity to decrease wages, purchase the plants of their ruined brethren and get the boom going again, but the cycle would repeat itself, leading to an even worse crash. And so the story will go on repeating itself, until eventually the means of production are concentrated in so few hands that they would be ripe for overthrow by a revolution of the proletariat egged on by its misery.

Karl Marx has captured the imagination of a large and fervent following spread all over the world and some of his ardent admirers give him (God forbid) the status accorded to a Prophet of God. Whatever the emotional appeal of Karl Marx, his place in history is served by his forecasting the depression of the 1870s and 1930s, and his forecasting the rising power of large corporations. The economic and social nightmare of the 1930s for a while threatened to prove the veracity of Marx's thesis, but fortunately the great depression also inspired the most significant theories of Keynes, who can rightly be called the saviours or the free enterprise system.

Keynes expounded the theory that **full employment** could be maintained in a free enterprise system and that it could be created and maintained through positive economic action. Keynes also showed that a deep recession was not necessary to cure inflation. Thus Keynes provided a viable alternative within the existing economic structure to deal with the alternating booms and slumps associated with the trade cycle. Full employment is a highly desirable objective not only on humanitarian grounds, but also for the very valid economic consideration that in a society where resources are limited in relation to individual and collective needs the absence of full employment is a waste of potential output caused by unemployment of resources. Full employment does not mean 100 per cent employment of all members of the labour force. At any particular moment of time there is bound to be some seasonal, frictional, structural and technological unemployment. Seasonal unemployment is caused by fluctuations in demand which occur regularly at a certain time of the year fractional of casual unemployment when people are changing jobs and when there is a certain lack of mobility of labour causing unfilled jobs at one place and unemployed labour at another. Structural unemployment is due to fundamental changes in the economy such as a decline of some industries and the rise of others; technological unemployment is caused by reorganisation within a firm or industry which replaces human labour by machines. There will also be some voluntary unemployment of people with private means or those who are social parasites and vagrants. Full employment assumes that these forms of unemployment will account for anything from 1 to 5 per cent of the labour force. It is difficult to pinpoint this figure with any degree of accuracy, but suffice it to say that full employment is said to exist when at least 95 per cent of the labour force is employed.

The **Keynesian Theory of Employment, Interest and Money** is based on the premise that income (and therefore employment) depends on expenditure. The expenditure of A, B, and C is the income of X, Y AND Z, and the expenditure of the Community as a whole is equal to the income of the community as a whole. The starting point is the concept of **EFFECTIVE DEMAND**, by which the amount of employment is translated into terms of demand for goods and services, that is, the eventual determinant of the volume of employment is found in the degree to which the entrepreneur decides to judge such employment to be profitable. The total amount of money available to make demand effective is the total money income created in the economy. Payments are the obverse of receipts, and so **NATIONAL INCOME** equals **NATIONAL OUTLAY** and employment depends on the size of national income.

Now the two constituents of effective demand (or income) are demand for consumption and demand for investment goods. Of these two constituents consumption is stable and depends on the size of the income. Keynes maintained that the proportion of income which was spent depended upon the **propensity to consume** or the consumption function, and this in turn meant the relationship between total income and aggregate consumption. Keynes theorised that in the short-run the propensity to consume could be regarded as a relatively unchanging function of aggregate income. He further maintained that only the poorest spend all their income on current consumption and save nothing, and that although such expenditure increased when incomes increased it did so less than proportionately. A higher income meant a relatively lower consumption, and vice versa. The expression **marginal propensity to consume** indicates how one additional unit of income is divided between current consumption and saving. The relationship between total income and the part of income which is saved (that is not spent on current consumption) is called the **propensity to save**. The **marginal propensity to save** is the ratio of change in savings to a change in income. Thus the marginal propensity to consume and the marginal propensity to save are less than one.

The total income in an economy must equal the expenditure on current consumption plus some other expenditure, which must be **INVESTMENT**. It has been indicated that the volume of employment is determined by the level of income, and the level of income is determined by the levels of consumption and investment. From this it follows that the level of employment depends on the levels of consumption and investment. Again as increments of income come from increments of output, the marginal propensity to consume shows us, to use Keynes's words "how the next increment of output will have to be divided between consumption and investment."

Keynes has thus established a functional relationship between employment, consumption and investment.

Apart from the propensity to consume, Keynes names two other fundamental determinants of the levels of income, consumption and investment. These are "the psychological attitude to liquidity and psychological expectation of future yield from capital assets." Keynes uses the phenomena of **liquidity preference** as the key to the explanation of interest rates by explaining that people have valid reasons for holding a part of their assets in liquid form for transaction, precautionary and speculative motives. Interest to Keynes is a purely monetary phenomena, a reward for giving up liquidity. It is, therefore, necessary to know about the supply of money and liquidity preference in order to judge the role of interest as a determinant of the volume of investment, and to explain the depressions of the trade cycle and to suggest remedial action.

The psychological expectation of future yields from capital assets is measured by the right to a succession of expected returns from the investment. Keynes coined the expression **marginal efficiency of capital** to describe the difference between the prospective yield of one additional unit of capital and the cost of producing it. Profit and marginal efficiency of capital can be regarded as one and the same thing. Since there are different types of capital so there are different marginal efficiencies of capital, and the greatest of these "can be regarded as the marginal efficiency of capital in general" (Keynes). Keynes further argues that an increase in investment will tend to reduce the marginal efficiency of capital because the proportionate yield will fall and the cost of producing capital will rise. Thus by relating investment rates to the corresponding marginal efficiencies of capital which these rates will establish, we can formulate an **investment-demand schedule** in terms of the marginal efficiency of capital.

Another concept used by Keynes is that of the **accelerator**. The acceleration principle shows how changes in consumer expenditure causes changes in new capital formation. If consumption increases, the extra demand occasioned by the increase in consumer expenditure will cause production facilities to be increased and thus create new capital formation. A fall in demand may, on the other hand, cause producers not to replace equipment that is worn out. The ratio of change in capital formation to change in consumer expenditure is called the **coefficient of acceleration**.

Keynes did not accept the role of interest for equating savings and investment. In Keynesian theory **Savings and Investment are always equal**. Saving (S) is defined as income (Y) minus consumption (C). Income (Y) is equal to consumption (C) plus investment (I). Therefore investment is equal to savings,  $S = Y - C$  or  $Y = S + C$ , and  $Y = I + C$ ,  $\therefore I = S$ .

This conclusion has been much disputed, but it is now generally accepted with minor modifications. This aspect of Keynesian theory and the paradox of "poverty in the midst of plenty" have been ably described by Mrs. Joan Robinson as follows:

"When investment increases, incomes rise to the point at which saving increases equally, but if the desire to save increases, income fall off so much that, on balance, saving is no greater than before. It is through changes in income that the equality of saving and investment is preserved. Thus the level of income is determined by the rate of investment and the desire to save; given the desire to save, the level of income that will rule is governed by the rate of investment. And given the rate of investment the level of income is determined by the desire to save.

"We are now able to give a provisional account of how it comes about that resources can be wasted in idleness. If the amount that entrepreneurs in given conditions are willing to invest is less than the amount that individuals, taken together, would want to save out of the incomes which the full employment and full use of resources would entail, then there cannot be full employment, and incomes will in fact be less than they would be if full employment obtained. Or, to look at the same thing in another way, suppose that the investment decisions of entrepreneurs have been taken in the light of expected future profit, then the current rate of investment is given, and if individuals are not willing to spend on current consumption the whole difference between the rate of investment and the total of income that there would be if there were full employment, then there will not be full employment.

"Thus the popular description of unemployment as poverty in the midst of plenty contains a large element of truth, for in one sense unemployment arises because the incomes which some individuals would enjoy, in the absence of unemployment, would be so large that they would not want to spend enough money to make it profitable for entrepreneurs to give everyone who wants to work employment."

The Keynesian theory establishes a close relationship between the two determinants of the level of investment: the marginal efficiency of capital and the rate of interest. When there is a revival in the economy and it is emerging from a depression, business optimism increases because the marginal efficiency of capital (that is the rate of profit) is rising. Eventually this increase will cease and the marginal efficiency will fall. This accounts for fluctuations in the level of investment and subsequent fluctuations in the level of employment.

This subsequent effect is subject to what Keynes terms as the **multiplier** effect. The concept of the multiplier was earlier developed by Kahn, and it is really a re-expression of the concept of marginal propensity to consume, that is, the ratio between an increase in consumption and an increase in income. A change in income leads to a change in investment, which itself will generate a change in income. The factor by which income is changed is called the **multiplier**. The multiplier will be the reciprocal of 1 minus the marginal propensity to consume. If the marginal propensity to consume is  $\frac{3}{4}$  (or 75 per cent), then the multiplier will be the reciprocal of  $1 - \frac{3}{4}$  or the reciprocal of  $\frac{1}{4}$ , that is 4. Algebraically the multiplier (K) can be expressed in the following formula, where X is the increase in capital formation,  $\Delta C$  is the increase in consumption,  $\Delta Y$  is the increase in income (marginal propensity to consume is therefore  $\Delta C /$

$$\Delta Y) \text{ then } K = \frac{X}{1 - (\Delta C / \Delta Y)}$$

The working of the multiplier effect has been clearly represented by Mrs. Joan Robinson:

"When an increase in investment takes place, say in house building, at a time of general unemployment, men are given jobs in building, in making materials, such as bricks, glass and door-knobs, and in transport. The additional employment thus given is the primary increase in employment due to the increase in investment. When employment increases the men concerned increase their rate of consumption—buying more boots and shirts and bacon and cheese. Similarly, when more profits are being made by building contractors and so forth, the individuals whose incomes have increased will spend more upon consumption goods. Thus employment will increase, and more profits will be earned, in making the boots and other goods for which the market has now improved. The boot operatives, in turn, have more money to spend when they are taken into work, shareholders receive larger dividends, the shops and cinemas and garages make bigger profits. With larger incomes being earned in the consumption-good industries a further increase in consumption takes place, and employment and profits, in making boots and selling petrol and the rest, increase still further. Larger incomes again lead to more consumption and so on, round and round. The addition to employment in the consumption-good industries is the secondary increase in employment due to the increase in investment."

"At each round the addition to employment and to incomes is less than at the last. The receiver of profits increases his rate of saving when his income increases, so that less than the whole of the additional profits earned at each round is used to increase consumption. And only a part of the wage which a man receives when he finds work is an addition to his income. Even when he is unemployed he is not living on air. He may be receiving unemployment benefit, relief payments, or assistance from friends or from charity, or he may be keeping body and soul together by drawing on his own past accumulated savings, by pawning his furniture or getting into debt to shopkeepers. For convenience we will describe the income of the unemployed, from whatever source it may be drawn, as dole income. Part of the expenditure which a man makes when he earns wages merely replaces the dole which he was spending while he was unemployed. Thus less than the whole outlay upon house-building is passed on to the consumption-good industries at the second round and less than the whole of the additional incomes received at the second round is passed on at the third round, and so forth."

"The extent to which income is passed on from round to round governs the increase in employment. The ratio of the total increase in employment to the primary increase is known as the Multiplier. If, for example, there is an increase in employment of two men in consumption-good industries for every man newly employed in capital-good industries, then the Multiplier is equal to 3."

The entire multiplier effect is not fully absorbed within the country and the final contribution is reduced by leakages which amount to a decrease in the marginal propensity to consume. The multiplier effect would be reduced by price increases, imports increasing more than exports, repayments of loans, and a higher propensity to save. Countries which are more self-sufficient would have a higher multiplier than countries where an increase in economic activity is immediately reflected in a rising import bill. In the latter group, full employment policies may well create a balance of payments problem unless exports also increase simultaneously and proportionately.

The **rate of interest** is another determinant of the rate of investment and Keynes believed that it would not decline sufficiently or fast enough to maintain the full employment level of investment should the marginal efficiency of capital be declining. Keynes held this view in the light of his treating interest as a monetary phenomena, which was determined by liquidity preference and the supply of money. The consistent nature of money supply and liquidity preference would not permit interest to fall sufficiently to be certain of full employment. Investment will, therefore, only continue upto the point at which the marginal efficiency of capital is equal to the rate of interest. The normal trend is increased investment and falling marginal efficiency of capital, but the resistance of interest to reduction hinders this and restricts investment. It thus becomes possible for the equilibrium position to be below the full employment level.

Thus the Keynesian Economics established vital functional relationships between employment, income, consumption, savings and investment, and in doing so suggested in no uncertain terms the steps that should be taken to correct undesirable tendencies in an economy. These steps are discussed in a subsequent section on "Inflation, Recession and Monetary Policy."

Keynes has very successfully belied Max Planck (inventor of the Quantum Theory in Physics) when he remarked that science makes progress funeral by funeral: the old are never converted by the new doctrines, they simply are replaced by a generation. Even during the 1930s eminent people like the economist Alvin Hansen (1887-1975) and President Franklin Delano Roosevelt became devout disciples of Keynes and worked out the implications of his Theory for practical economic policy. Fiscal and monetary policies were combined with public work programmes and budget deficits to get the economy moving again. Hansen's formulation of his doctrine which spelt out the danger of long-term stagnation under undiluted capitalism strengthened the Keynesian diagnosis and its prognosis in the form of an activist governmental role in charting the cause of the economy. The USA being a vast, more affluent and more self-sufficient economy than the UK, provided a more suitable ground for testing the Keynesian analysis. The US Employment Act of 1946, which made the government responsible for providing job opportunities was a fitting tribute to Keynes who died in that year. In the United States, the Keynesian philosophy has accelerated the profusion of progressive legislation, including anti-trust and anti-cartel laws, banking and stock market regulations, consumer protection anti-pollution measures, affirmative measures for hiring more blacks and other minorities and women, medical aid, unemployment relief, welfare payments, and food stamps.

The popularity of Keynes is not confined to the USA. After World War II, most of the developed countries have become enthusiastically Keynesian. Depressions, let alone recessions, are actively combated and the idea that government is responsible for the health of the economy is widely accepted. Until about five years ago it appeared from the experience of the past 20 to 25 years that the USA, Canada, Western Europe and Japan were on the verge of producing the permanently affluent society, thanks to Keynesian policies which kept recessions brief, mild and infrequent. This situation lead Stigler to announce that "Economics is finally at the threshold of its Golden Age—nay, we already have one foot through the door."

A valid question which arises is the **extent to which the Keynesian Theory is applicable to**



**under-developed countries.** It goes without saying that the powerful tools of economic analysis developed by Keynes are absolutely indispensable in analysing the various economic problems which are faced by the developing world. It would also be incorrect to say that effective demand does not play a crucial role in their development. In the absence of the demand for consumer and investment goods and services, there would be hardly any worthwhile economic activity. Again even in developing countries consumption is a function of income, and income in turn is dependent on consumption and investment. The concepts of marginal propensity to consume, marginal propensity to save, liquidity preference, marginal efficiency of capital, accelerator, and multiplier are applicable to the under-developed world, as are the discussion of monetary flows, national income accounting, and inflationary gap.

The basic difference in the application of the Keynesian analysis to the industrialised countries and to the developing countries lies in the concept of savings. The main problem of unemployment in the developing countries is scarcity of capital which is due to the low levels of investment, income and savings. As against this, the main stress of the Keynesian approach is to explain unemployment in terms of a deficiency of essential demand. Thus savings in developed countries are not the virtue they are made out to be in the developing countries. It should however be noted that even in developed countries investment which is financed from voluntary savings is, generally speaking, non-inflationary.

But what of a poor country which cannot secure foreign assistance to embark on a development programme? Should it be satisfied with a low rate of growth which does not even provide for the increase in population? Or should it embark on a reasonably ambitious programme which is substantially financed through deficit financing under which "forced savings" are created to finance a large part of the developmental outlay, and in this way hope for better times after a period of denial extending from 4 to 5 years? The answer to the last question would probably be a resounding "yes" because perpetuation of economic and social distress cannot be preferred to an extensive hardship lasting 4 to 5 years. Care should, however, be taken to ensure that no one generation is asked to carry for a long period an unbearable burden for the sake of future generations. Keynes had rather aptly remarked that life is a series of short-terms for in the long run we are all dead.

## **Can a Mixed Economy or Diluted Capitalism Survive ?**

In 1975, when Adam Smith's economic system known as capitalism was nearing the 200th anniversary of its genesis, disturbing questions were being raised on whether it could survive, or whether indeed it should survive. In January, 1975 seven Nobel Prize winners, including Professor Gunnar Myrdal signed a declaration condemning western capitalism for bringing on a crisis by producing "primarily for profit". They called for an intensive search for "alternatives to the prevailing western economic systems". The problem has arisen on account of the twin perils of inflation and stagnation production during the past 3 to 4 years. Keynes and Adam Smith did not provide for remedies for an explosive inflation from random shocks in 1973-74 which included the huge increase in oil prices by the OPEC cartel and food shortages caused by unusually bad climatic conditions.

Nor did Keynes and Adam Smith foresee: (i) powerful trade unions pushing up wages and therefore, prices, even when unemployment was high and increase in wages was neither justified by the increase in price level nor by increase in productivity; (ii) humanitarian programmes and those relating to social security which maintain the "ability to buy" of the consumers and the ability of businessmen to resist a reduction in price, even when unemployment is high; and (iii) the growth of the service industries which account for an increasing percentages of sales and jobs and where it is difficult to match the increase in wages through increasing productivity. The tremendous intellectual challenge facing the free enterprise system (it is a misnomer to call it by this name—the correct expression is diluted capitalism or mixed economy) is to devise wage and price restraints that would be effective but not coercive.

It is wrong to assume that a mixed economy (and almost all the free enterprise economies today are mixed economies) must inevitably face galloping inflation and that the only way to

overcome it is by going through a deep recession. There are practical and viable means of dealing with the situation. These are discussed in detail in the subsequent section on "Inflation, Recession and Monetary Policy."

The case of the mixed economy or diluted capitalism as against that of an authoritarian economic system will be decided on the answer to four questions:

- i) Which system is more effective in promoting growth through a better utilization of manpower and materials?
- ii) Which system provides for more opportunities for free choice, development of the human personality, and material benefits for the greatest number of people?
- iii) Which system is more satisfying and provides for greater justice in human terms?
- iv) Can the mixed economy or diluted capitalism provide an acceptable remedy to the inflationary and recessionary problems that seem to plague it?

A detailed analysis of these four questions would take a whole volume which, God willing, the author hopes to undertake in the future. The scope of this book limits the treatment of this subject to bare essentials.

Capitalism has been severely criticised on a number of grounds:

- i) Competition, which is the basic feature of capitalism, involves wasteful expenditure on advertising and salesmanship.
- ii) Efficiency of capitalism depends on the existence of free competition and the mobility of labour and capital, but in real life there is little free competition and factors of production are immobile.
- iii) There is no harmony between producers and consumers. The deceit of unscrupulous producers and the ignorance and importance of consumers reduces the sovereign consumer to an abject slave, who is the object of exploitation.
- iv) The recurrence of trade cycles in the form of alternating booms and depressions is an offshoot of capitalism as a result of over-production and lack of adequate effective demand. Unemployment in a period of recession and inflation take a heavy toll in terms of human hardship.
- v) Labour does not have a sense of security.
- vi) Capitalism lays undue emphasis on property rights as against human rights.
- vii) Capitalism causes social and political unrest by dividing society into two hostile camps—labour and capital.
- viii) Capitalism creates and perpetuates inequalities in the distribution of income and wealth.
- ix) Capitalism creates unacceptable anomalies such as the co-existence of luxury and starvation, foodstuffs rotting while human beings starve, and machines lying idle while unemployment rages.
- x) Capitalism has resulted in the dominance of the Corporation, particularly the Multinationals. John Kenneth Galbraith has argued that corporations have already killed Adam Smith's self-regulating market, and the larger a corporation grows the more it can escape from the workings of the market and become a law unto itself thus paralyzing Adam Smith's "invisible hand."

The critics of capitalism ignore the real facts of life inasmuch as there is no such system prevailing today as pure capitalism. Capitalism has been completely diluted and replaced by a mixed economy in which the State plays a dominant role not only in planning and directing all forms of economic policy but also in owning and operating certain projects in the realm of economic and social activity. Thus most of the criticism levelled against the present day form of capitalism is unwarranted. Instead of trying to destroy the system, which has served the world well for centuries, it would be well to restructure it to the needs of the day. This process of restructuring is already under way and some of its salient and encouraging features are:—

- i) Corporations are being increasingly subjected to strict monopoly and cartel control regulations. An international code of conduct for multinational corporations should also be on the anvil pretty soon. It is true that while multinational corporations have brought to many countries jobs, the latest in goods and services, joint-stock companies, and the most advanced technologies and management techniques, they have managed to escape from any country's laws and regulations.
- ii) Planning is now an accepted way of life in all developing countries, oil producing countries, and most of the developed countries. Even in the USA people like Henry Ford II and Nobel Prize Winner Leontief have called for a high-level federal planning body "not because some wild radicals demand it but because businessmen will demand it to keep the system from sputtering to a halt."
- iii) The problem of inequality of wealth and income is being attacked through the creation of a greater equality of opportunity and greater economic growth. China is one country which has successfully achieved economic equality through severe regimentation, national cohesion and extensive participation of its people. Anything can be achieved if one is prepared to pay the price for it. Inequality has been defended on three grounds. First, as Professor Hayek argues, the only alternative to the market's unequal apportionment of rewards is the distribution of income on the basis of each person's moral worth, and how do we judge moral worth fairly? Secondly, pragmatists agree that inequality is necessary to reward with high income the initiative that produces economic growth; this growth makes the poor much better off than they would be in a stagnant economy that distributed wealth equally. Thirdly, inequality makes possible larger capital formation, particularly in the developing countries where it is most needed for economic growth. All developed countries and most developing countries provide for highly progressive income and wealth taxes and death duties, which exert a powerful levelling influence. In any case, some measure of injustice is inherent in an unequal distribution of income and wealth and is inescapable if the system is to perform efficiently and adequately.
- iv) The economy should be "fine-tuned" to respond actively at the first signs of inflation and recession through appropriate monetary, fiscal, social security and public works measures. The government should take the people into confidence and should not hesitate to take firm, albeit unpopular measures to counter at the first signs of impact an oncoming recession or inflation. Such measures should not be taken in panic; they should be well-planned in the nature of a contingent military operation. Thanks to Keynes and the experience of the last 40 years or so, the instruments of policy—money supply, bank rate, income taxes, indirect taxes, social security payments, public expenditure, including that on public works. Income policy, import and export controls—and their use should now be well known to the national administration to forestall and prevent the alternating booms and recession of the trade cycle. It should be emphasised that the response should be quick and to the point, no more and no less than what is warranted.
- v) Progressive labour legislation legitimising organised trade unionism, security of employment, fixing minimum wages and hours of work, and providing for social security are increasingly becoming prominent characteristics of the mixed economy. The days when labour could be exploited are matters of the past. Labour participation in management and profits is also becoming popular.
- vi) Consumer protection has become a major part of economic policy, even in countries like the USA, where people like Ralph Nader have brought consumer protection to a pitch which alarms certain producers. It is becoming increasingly difficult for a producer to exploit the consumer and get away with it. The profusion of civil suits claiming damages which irate consumers are filing against giant corporations reminds one of David's successful struggle against Goliath.

If Adam Smith were to be sent back to life by God, he would hardly recognise the face of Capitalism yet enough of Adam Smith's "invisible hand" "self-regulation" and "self-interest" still

remains to preserve in the mixed economy, the essential requisites of capitalism and the profit motive, which is indeed a most powerful human drive.

It would be worthwhile mentioning three illustrations which would indicate the strength of the profit motive. In the Soviet Union collective farmers are allowed to cultivate small private plots in their spare time, yet these plots which only account for 4 per cent of the cultivated land account for 25 per cent of total food production. The late Nikita Khrushchev once replied to a charge that he was turning the U.S.S.R. Capitalist. "Call it what you will, incentives are the only way to make people work harder". Canada, the U.S.A. and Australia, with a small farm population, produce enough food to feed themselves and the rest of the food-deficit world. The Soviet Union, on the other hand, employs 30 per cent of its labour in the agricultural sector and yet has to import food. In 1947 socialist-leaving India produced 1.2 million tons of steel, which was slightly more than that produced by Capitalist Japan. In 1973 Japan produced 119 million tons of steel, which was 17 times larger than India's production in that year.

Profits and other incentives are indispensable to any economic progress. Whether it be a socialist society or diluted capitalism, a product or a service that is sold for exactly its cost of production will yield no surplus to raise wages, buy new machinery, or purchase new technology. There is no denying the public appeal of a socialist authoritarian economy. This system offers security and stability at the expense of freedom, and a greater degree of economic (not political) equality than a mixed economy. It can create full employment by "creating a surfeit of make-work, low-productivity (and thus low-paying) jobs. It keeps prices stable by fixing them, almost invariably at high levels in terms of real income. Yet even the meagreness of living standards in such a system may have a certain attraction for millions of people outside those countries who are repelled or surfeited by commercial values...And the ability of the command economy to centralise power has an irresistible appeal for otherwise shabby leaders of developing countries...many of the developing nations have an interest in deprecating the economic achievements of capitalism, since none of their managed economics are doing well" (Time, 14 July 1975).

Historically speaking, capitalism is more enriching as it has encouraged people to be innovative, and to develop new products and processes. It has also produced a far greater variety and quantity of consumer goods services as compared to the socialist economies. This is largely so on account of the operation of the free private market where billions of decisions are automatically relayed through the chain of the customer, retailer, wholesaler and producer.

The freedom of the capitalistic system has to be cherished in the mixed economy. In a managed economy one encounters one-party rule, a completely totalitarian regime, and arbitrary decisions on production, price and wages that cannot be reconciled with political freedom. Strikes by labour and other kinds of demonstrations demanding economic redress are regarded as crimes against the state and are punished severely. The mixed economies have popularly elected governments; fundamental rights which are justiciable including those relating to freedom of speech, assembly and movement; freedom within broad limits to enter any business or profession and to own private property.

Diluted capitalism or the mixed economy, or REFORMED CAPITALISM, which enshrines the sovereignty of the consumer and the supremacy of the profit motive and is cleansed of the serious shortcomings of pure capitalism, provides the best known system of producing wealth as well as retaining the basic freedoms.

## Money Market and Capital Market

**The Money market** is one that facilitates the borrowing and lending of money for short-terms (two to three years) and is concentrated in a particular centre. Housek in "Foreign Central Banking" that a money market denotes a market for organised dealings in monetary assets, providing the liquidity needed by lenders and at the same time satisfying the short-term requirements of borrowers. The money market brings together banks which are in surplus with those that are in deficit and thus provides for the redistribution of loanable funds among banks. The banks can,

therefore, operate on a narrower cash margin. The government can also utilise the money market for meeting its requirements of short-term financing. The sensitivity of the money market enables the Central Bank to plan its monetary policy. The famous money markets of the world are London, New York, Zurich, Los Angeles, Hamburg, Amsterdam, Beirut, Singapore, Hong Kong and Tokyo.

The development of a money market is a gradual and uphill task and takes place only after the economy has developed sufficiently. The money market in Pakistan is by and large confined to inter-bank operations at Karachi. The more enterprising banks are borrowers, while the more conservative ones are lenders. The money market is also attracting some of the specialised credit institutions but their role is rather limited. The State Bank of Pakistan started issuing three-month treasury bills in 1948-49, both through tender and on tap, to provide banks with short-term investments and to remove sharp seasonal fluctuations in the rate of interest. The practice was stopped in 1959-60 because of the tightness of the money market, but it has since been restored primarily for raising funds for government.

Since the inception of Pakistan the inter-bank call money rate has varied from 1/2 per cent in June 1949 to 1/4 per cent in December, 1953, from 4½ per cent in December 1963 to 7½ per cent in June 1965, and sometimes to a figure even higher than the bank rate. The inter-bank rate is always higher in June on account of the seasonal demand for money. It should be understood that although inter-bank loans are at call, there is a gentleman's agreement that they would not be recalled for some time and would only be recalled at short notice if the lending bank faced a liquidity problem.

The hundi system disappeared with Independence in 1947 and there is hardly a bill market in Pakistan. Some Banks have, however, started discounting genuine trade bills of well-known parties and that for only very limited periods. Normally this period is limited to the time required in the movement of goods from the interior to the port or vice versa and not for the full time needed to sell the goods by the drawee.

The capital market consists of the lenders and borrowers of capital funds in the shape of long-term assets and securities. The main world centres of the capital market are London, Amsterdam, Paris, Zurich, Luxembourg, New York, Los Angeles, Beirut, Singapore, Hong Kong and Tokyo.

The capital market in Pakistan consists of the stock market and the bonds and securities market. About half a dozen specialised credit institutions are working to meet the long, medium and short term credit needs of industry, businessmen, agriculture and housing, in the private sector. These Institutions are the Pakistan Industrial Credit and Investment Corporation (PICIC), Industrial Development Bank of Pakistan (IDBP), People's Finance Corporation (PFC) and House Building Finance Corporation (HBFC).

The National Development Finance Corporation finances the public sector-owned and public sector-managed industries and enterprises. It has also been empowered to raise loans in foreign exchange. Commercial banks also provide some medium and long-term financing in the form of repeating short-term credits to important clients. The capital market for government securities (also called the gilt-edged market) is limited to the State Bank of Pakistan, commercial banks and insurance companies. The State Bank of Pakistan supports the gilt-edged market with a view to maintaining stability in their prices. Gilt-edged securities are included in the reserves of commercial banks, and any increase in reserve is generally accompanied by the purchase of securities from the State Bank, while a decrease in reserves is accompanied by the sale of securities to the State Bank. The gilt-edged market as has in recent years showed an upward trend in the yields, greater institutional demand by Provident Funds and other institutions, and a decline in the relative absorption of government securities by the commercial banks on account of other claims on their resources.

The Stock Exchange has not yet developed in the true sense of the word. There are Stock Exchanges at Karachi and Lahore. Shares which are offered to the public are either ordinary or preference shares, and the issue of debentures is done only in exceptional cases. Forward trading is also permitted in the case of certain scrips. The debacle of East Pakistan hit the Stock Exchange very hard on account of the high percentage of West Pakistani stockholders in East

Pakistani enterprises. The fate of these huge share holdings is still to be decided. Two other occurrences in the first half of the seventies which dampened the stock market were the nationalisation of certain heavy industries, shipping, insurance, banking and petroleum and the uncertainty of the extent of compensation. In 1975 it was decided to pay compensation at the break-up value or at the market value, whichever is higher. The delay in paying compensation also hit the Stock Exchange very hard. The other factor has been the stagnation in industrial production occasioned by unacceptable labour attitudes and the international recession. Compared to February 1970, the aggregate value of shares declined by 35 per cent in October 1974 and touched a low of 3340 million rupees. In 1975-76 budget, the Finance Minister announced certain measures to improve the performance of the Stock Exchange but the results have been rather limited owing to the loss of business confidence. Government are encouraging the development of the stock market by exemption from income-tax of dividend income from the National Investment Units and the Investment Corporation of Pakistan upto 10,000 rupees; exemption for other dividends upto 5,000 rupees; and exemption for interest on securities and debentures upto 5,000 rupees. It is an objective of public policy to enable a small and medium investors to become owners of means of production through holding of corporate shares. Institutions like NIT and ICP have been created to broadbase the ownership of shares.

## Inflation, Recession and Monetary Policy

Monetary policy refers to the use of certain monetary controls by government to regulate economic activity. These monetary controls include changes in the supply of money through open market operations, changes in the bank rate to make borrowing cheaper or dearer, and direct or indirect controls on credit to make it easier or more difficult to obtain credit including the rationing of bank credit and varying reserve requirements. Every country retains the right of monetary sovereignty, which implies that despite any pledges that a country may give to international organisations like the International Monetary Fund, it retains the right to protect its economy through any monetary measures (including changing the par value of its currency, that is devaluing or revaluing of currency) designed to protect its economy against inflation, deflation, unemployment, etc.

**Inflation** in essence implies "too much money chasing too few goods." An inflationary situation is, however, a complex relationship between a large number of economic forces which are so elusive as to cover political uncertainties and social upheavals.

The situation is basically one in which prices are rising and there are severe pressures which accentuate the decline in the value of money. This situation can arise in a number of ways, but a useful and more general approach is to relate expenditure (the spending of income) to the number of exchange transactions that take place. If incomes increase, or if the proportion of incomes boarded increases, and this increase in the volume of money available for exchange transactions is not matched by an appropriate expansion in the number of transactions then prices will tend to rise. If money spending falls or hoarding increases and the exchange transactions fall even more, then prices too will tend to rise; but this is not a normal inflationary condition. Now the volume of exchange transactions depends upon the goods available for consumption and if the demand for this limited supply increases above what is available there will be an upward pressure on the level of prices. Inflationary pressures thus arise from an increase in income spending and decline in the amount of goods and services available, or both. The increase in income spending is referred to as the "demand pull", and **demand pull inflation** results from increases in effective demand. This situation follows an increase in the amount of money in circulation and/or an increase in the velocity of circulation. If there is no increase in production, for a variety of reasons the major one being that the factors of production are fully employed, then an expansion of money supply will be inflationary. Excessive creation of money supply can result in huge rises in prices which are called **hyperinflation** or **runaway inflation**. Inflation is, in fact, a function of investment and the propensity to save of the government sector, entrepreneurs and households, on the one hand, and the availability of goods and services on the other. Inflation is the end-result of aggregate demand for all purposes (consumption, gov-

ernment expenditure and investment) exceeding the supply of goods and services at current prices.

Another variety of inflation is **cost-push** or **wage-pull inflation**. This occurs when the costs of production, particularly wage cost, go on rising. The increase in the level of employment enhances the bargaining power of labour, and this situation is exploited by labour to secure wage increases which are neither justified by the rise in the cost of living nor the increase in productivity. Employers, in turn, are able to pass on these added costs to the consumer on account of the high level of effective demand. Normally demand-pull inflation is reinforced by cost-push inflation, and so the cycle can go on producing a state of hyperinflation. The existence of foreign trade can further complicate the situation in two different ways. First, inflation can be imported on account of increases in the foreign prices of domestic imports. Secondly, an inflationary situation encourages increased imports to serve the frustrated home demand, and this worsens the balance of payments situation. There is increased pressure from the import side and stagnation on the export side because of inflation having made the exports internationally uncompetitive. The excess of income spending over that required to keep the factors of production fully employed is called the inflationary gap.

**Recession** or **Deflation** is the opposite of inflation. When the supply of money falls relative to the number of exchange transactions, prices fall, and a recession exists. In such a situation incomes are either reduced or are not being spent, and the amount of goods and services offered has not contracted to the same extent, with the result that the level of prices falls. Economic activity is depressed and the level of employment falls. In the sphere of foreign trade, a policy of disinflation could lead to increasing exports (through reducing their prices and also increasing the exportable surplus occasioned by reduced domestic demand) and discouragement to imports on account of reduced effective demand. In a recessionary situation all the available goods and services are not absorbed on account of a deficiency in spending. The **deflationary gap** measures the volume of spending (investment, government expenditure and consumption) needed to bring the total volume to a level at which all the goods and services produced (when all factors of production are fully employed) can be absorbed. The term deflationary gap or recessionary gap is also used to describe the primary impulse (working through the multiplier and accelerator principles) needed to eliminate a given total deficiency of demand.

**Stagflation** is a relatively new addition to the jargon of economics and implies a situation in which we are faced with marked inflationary pressures combined with stagnation in production. This is what the industrialised countries and most of the developing countries faced between 1973 and 1975. The malaise does not submit readily to the anti-inflationary and anti-recessionary techniques because of the existence of two powerful infections which call for treatments that are diametrically opposed to one another. This kind of treatment calls for the best available expertise, and this does not come easily. Firm and painful decisions have to be taken. In some cases the continuance of inflationary pressures has to be tolerated for a period of time and the balance is tilted towards increasing effective demand for coping with the growing unemployment problem. In other cases unemployment is not regarded as the major evil, and anti-inflationary measures are brought into play while mitigating the suffering of unemployment through the provision of social services. Stagflationary conditions do not appear overnight and sufficient warnings are given of the symptoms of the malaise to caution responsible governments of the impending peril and take prompt and decisive action to avert the crisis.

## Inflationary Situation in Developing Countries

The prevalence of an inflationary situation in developing countries is a far more serious matter than in the industrialised countries. In the former the levels of consumption are pretty low and inflation really eats into the vitals of the vast majority of the population. The nature of inflation is also different to that in developed countries. Inflation in the developed countries generally develops after reaching the full employment level and the problem is basically one of adjusting effective demand to the availability of goods and services. During a depression industrialised countries have plenty of excess capacity so that an increase in production to

meet an induced increase in effective demand does not create a serious problem. Now in under-developed countries unemployment and inflation coexist during the period of accelerated economic development. There is a time-lag between expenditure on investment and the period when that investment bears fruit; besides, a substantial part of the developmental expenditure is increased on building up the essential economic and social infrastructure (roads, railways, ports, electricity, postal and telecommunications services, housing, education and health facilities), which does not result in the immediate production of consumer goods, and this averts a further pressure on inflationary trends. In fact under-developed countries have to learn to live with a moderate inflationary trend of 2 to 6 per cent for long years, even if the economy is well-managed. In the developing countries the critical problem is the availability of capital and technical know-how required to put people to work. There is not much of excess capacity in under-developed countries, and the problem is not one of utilising excess capacity but that of creating additional capacity to satisfy the increasing effective demand and rising expectations.

The problem of inflation in under-developed countries is further compounded by the high income elasticity of demand for food items, such as sugar, vegetable ghee, meat, milk, tea and vegetables and other consumer goods, such as shoes, cloth, transistor radios, bicycles and matches. The increase in the demand for these kinds of goods is proportionately far greater than the actual increase in money income. There is also an increase in the demand for food-grains and pulses, the supply of which cannot be significantly increased in a short period. Moreover, a substantial part of agricultural production, such as cotton, cotton-seed, oil-seeds, sugarcane, tobacco and gum are raw materials for industries, and any increase in their prices increases the cost of production of manufactured goods and further feeds the inflationary trend.

The problem of inflation in under-developed countries is further aggravated when they are caught in the cross-fire of giants such as happened between 1973-75. The five-fold increase in oil prices triggered severe inflationary pressures by diverting previous foreign exchange resources away from sorely needed requirements of development and consumption towards maintaining the same level of petroleum imports.

This was not all. Increased prices of oil led to a formidable increase in the prices of fertilisers, insecticides and pesticides causing grievous harm to agriculture, and raising very substantially the cost of producing agricultural goods. The increase in the cost of energy had a depressing effect on economic activity and sharply increased inflationary pressures in key economic sectors, such as power, transport and communications. On top of this, the imported cost of plant and equipment, transport vehicles, industrial raw material and spare parts obtained by the developing countries from the industrialised countries, registered an annual increase of 30 to 40 per cent. OPEC countries blamed the industrialised countries while the latter put the responsibility for triggering inflation on the increase in oil prices. The heaviest price in terms of bearing this two-pronged onslaught on the value of money was paid by those who could least afford it—the non-oil producing countries of the Third WORLD.

## Tools for Avoiding Inflation and Recession

Reformed capitalism needs a moderate amount of inflation to sustain economic growth. Wages generally keep up with a moderate degree of inflation, and in fact wages actually increase with rising productivity. For the fixed income group the rise in price is so imperceptible that they do not notice it, and by the time they do they are dead. What we are concerned with is providing reasonable price stability at full employment level. Reasonable price stability could be safely implied to mean allowing a 2 to 6 per cent per annum increase in the general level of prices. An increase beyond this point should be taken to signify the heralding of inflationary pressures, while any increase less than the lower limit of 2 per cent should indicate the beginning of a recessionary trend. The management of an economy on a stable basis constitutes a most delicate operation in a free and democratic society and constitutes a mighty challenge to our present day mixed economy (or diluted or reformed capitalism).

The foremost requisite of sound management is to catch the first symptoms of the anticipated malaise and take firm and decisive, albeit unpopular, decisions. It is rather difficult for democrat-



ically elected governments to take unpopular decisions, but if they delay in taking recourse to such action, they would be required to take harsher and even more painful decisions at a later stage. Inflationary or recessionary trends should be fought sternly when they are young and tender. If allowed to grow into strong and ugly adolescents they resist and kick around fiercely and can only be controlled through deep surgery. Both optimism and pessimism feed on themselves, and inflationary and deflationary situations carry within them the seeds of their intensified perpetuation. Increase in prices leads to increase in profits and, therefore, increase in investment, which, in turn, leads to further increase in effective demand causing a further increase in prices, profits and investment, and so on. Similarly, falling prices lead to losses, which diminishes investment, which, in turn, diminishes income, further lowers effective demand and prices, leading to less investment, and so on.

Time is, therefore, the key to success when dealing with such situations. It is equally important that the anti-inflationary and anti-recessionary measures should be fine-tuned to the intensity of the trend under reference. You do not need a cannon to kill a rabbit. The reaction to such trends should be a measured one, no more and no less than what circumstances warrant. In effect governments should not react in panic. They should react quickly but with only that amount of caution which the occasion warrants.

Thanks to Lord Keynes and the magnificent strides which economic theory and practice has taken during the last 40 years or so, the arsenal of tools available to Government for combating inflation and recession effectively are many, and they can be used severally, or collectively to face the situation. Anti-inflationary and anti-recessionary measures can be discussed under six major groups:

- i) Monetary measures;
- ii) Taxation measures;
- iii) Public expenditure;
- iv) Changes in the par value of the currency;
- v) Price control and rationing; and
- vi) Changes in availability of goods and services.

Actually (ii) and (iii) could be put together in the group of fiscal measures, but they are treated separately to be discussed with greater clarity.

**Monetary measures** consist of variations in the bank rate, open market operations, cash reserve requirements and liquidity ratio, as also selective credit controls and moral persuasion and demonetisation. They are designed to either increase or reduce aggregate demand and also to encourage or discourage investment.

The bank rate, that is the rate at which the Central Bank is willing to rediscount eligible bills of exchange offered by commercial banks, is the pace-setter of the interest charges of the banking system. Increase in the Bank Rate makes borrowing more costly (thus makes investment relatively unattractive), makes savings more attractive (thus reduces current consumption), and has an adverse psychological influence on business confidence. This has an anti-inflationary impact. Similarly, a reduction in the Bank Rate makes investment more attractive by reducing the cost of labour, makes saving less attractive (thus increasing current consumption), and has a favourable psychological effect on business confidence. Reduction in the Bank Rate is an anti-recessionary tool.

Open market operations directly affect the capacity of commercial banks to create money, open market operations by the Central Bank can create money supply by the Central Bank buying government securities from the commercial banks and the public. Conversely the sale of government securities by the Central Bank will cause a reduction in money supply. Central Banks can thus create money supply in deflationary times and reduce money supply in inflationary times.

Commercial banks are generally required by law to maintain a certain percentage of their demand and time liabilities with the Central Bank. This is called the cash reserve requirement.

and if the required reserve of any commercial bank falls below the statutory minimum it is required to pay a penal interest of 2 to 3 per cent above the bank rate. Increase in cash reserve requirements will have a depressing effect by reducing the credit which commercial banking can create. A decrease in cash reserve requirements will have the opposite effect.

The Central Bank also required them to maintain a certain minimum liquidity ratio, which is a certain percentage of their demand and time deposits. This liquidity has to be maintained in cash, gold or unencumbered approved securities. An increase in the liquidity ratio would enable commercial banks to reduce the supply of money while a decrease in it would enable commercial banks to increase the supply of money. The former is anti-inflationary while the latter is anti-deflationary.

The Central Bank can also impose selective credit controls and commercial banks have to follow them in relation to loans. This is a powerful and more direct method of monetary control, although it does interfere with the administration and operation of commercial banking.

The Central Bank, on account of its prestige and the unique position which it enjoys in the banking structure, is able to guide the commercial banks by giving informal advice. This is called moral suasion.

Demonetisation means withdrawing a certain portion or the entire circulation of notes and coins. This is an extreme measure which should be used only in cases of hyperinflation as it tends to destroy confidence in the monetary system.

There are certain obvious limits to the efficiency of monetary measures in fighting inflationary and deflationary trends. First, there has to be close cooperation between the Central bank and commercial banks in order to ensure the success of monetary measures. Secondly, in booming times the Bank Rate is not a serious deterrent to investment due to the prevalence of high rates of anticipated profit. Lastly, open market operations can only be effective if there is a broad-based market in government securities, and this does not exist in under-developed countries.

**Taxation measures** have a pronounced effect on the level of economic activity. High rates of income and corporate taxes reduce consumption, discourage investment and make savings difficult; they have an anti-inflationary impact. Reduction in income and corporate taxes (including an increase in tax exempt personal allowances and rebates) encourage investment and consumption; they have a lifting influence on the economy and are anti-recessionary. Increase in indirect taxes, such as excise duties, sales tax and import duties raises the price of goods and thus discourages consumption and investment, while a reduction in such taxes encourages consumption and investment. The former is deflationary and the latter is inflationary. Increase in export duties is deflationary because it discourages exports and provides for greater availability of the affected goods in the domestic market.

Income and corporate taxes which encourage investment such as tax holidays, investment allowances and liberal depreciation allowances lead to increased economic activity and will be inflationary at a time when all the factors of production are fully employed.

**Public expenditure** plays a crucial role in aggravating or alleviating inflationary and recessionary situations. An increase in public expenditure is obviously inflationary while a decrease in public expenditure has a depressing effect, unless, of course, the changes in expenditure in the private sector counterbalance this increase or decrease as the case may be. When there is unemployment and factors of production are lying idle, government can help restore the balance by increasing its expenditure even on projects of lower priority. An increase in social service payments during times of recession not only serves a humanitarian purpose but also acts as a stimulus to the economy by increasing consumption. In inflationary times it is of the utmost necessity that government observes strict financial discipline, limits public expenditure as far as practicable, and concentrates largely on productive projects enjoying a high priority. Such projects would include those relating to agriculture and industry which do not have long gestation periods. Thus not only is the totality of public expenditure important but its composition is equally so. Unproductive public expenditure on administration and defence, as also on giant "prestige projects" and the social sector avert powerful inflationary pressures. Expenditure on education and public health has, however, been defended by eminent people like Gunnar Myrdal

as a valuable long-term investment. Suffice it is to say here that in an inflationary situation the public expenditure on administration, defence and the social sector should be judiciously planned with reference to the requirements of the time and prevalent conditions. Wastage in any form should be avoided and every item of expenditure should be examined with a fine comb so as to produce overall cost effectiveness.

Finally, the method of financing public expenditure is equally pertinent as neutral finance is indeed difficult to practice. Budgetary deficits and increases in the national debt are inflationary. Use of counterpart funds generated by the sales of goods obtained through foreign assistance is not inflationary as the increase in expenditure is matched by the increase in the availability of goods. The effects of variations in different types of taxes has already been discussed.

**Changes in the par value of Currency**, that is, devaluation and revaluation, are sometimes used to correct chronic imbalances in external receipts and payments, and for correcting severe inflationary and recessionary trends. Revaluation or devaluation of a currency should never be done frequently as this would destroy national and international confidence in the currency of the country. Devaluation makes it more expensive to import goods and encourages exports by making domestically produced goods and services cheaper in terms of foreign currency. Devaluation is thus inflationary, while revaluation (that is increasing the value of national currency in terms of foreign currency) has the opposite effect and firmly dampens inflationary pressures.

**Price Control and rationing** are frequently used in inflationary conditions to reduce the inequality in society created by inflation. Price control is sometimes adopted without any control on distribution, but this can never be really effective. Price control to be effective must be accompanied by sound distribution controls in the nature of rationing. The pressure of demand on limited supplies is not allowed to surface in the form of higher prices, and a situation exists which is called suppressed inflation. Price control and rationing inevitably lead to corruption and the growth of a class of spivs and drones who make a good living by selling permits. Such controls also lead to a distortion in the structure of production as investment no longer flows into the production of controlled items (which although economically and socially desirable do not yield high profits on account of price control), but is diverted to the production of luxury goods and other less socially desirable goods whose price is not controlled and which yield higher rates of profit. Thus price controls severely interfere with the working of the price mechanism and in allowing Adam Smith's "invisible hand" to do its duty. Price controls should only be imposed under conditions of dire emergency, such as war or a natural calamity. The attack on the inflationary peril should rather be mounted from the supply side through increased production, or from the demand side by reducing the level of aggregate demand. The author, while working in the Ministry of Industries in the early sixties witnessed at first hand the problems created by price and distribution controls. Prices of iron and steel items (the basic raw material in the engineering and construction industries) and truck and bus chassis were controlled by the Ministry of Industries, which also regulated their distribution. There was widespread corruption at the public dealing level, an unending stream of visitors, and strong pressures emanating from powerful groups. The author helped solve this malaise by decontrolling the prices and distribution of these items, and this was only possible after we had persuaded the United States Development Loan Fund authorities to give Pakistan an initial loan of 127 million dollars for iron and steel and 25 million dollars for truck and bus chassis. Prices slumped to a reasonable level, a main source of corruption was eradicated, the permit class ceased to exist in a substantial economic sector, an essential industrial raw material was freely available, and the engineering and transport industries were infused with new vigour.

**Increase in the availability of goods and services** is the neatest, the most effective and the most equitable way of tackling inflation, if the country can find the internal and external resources required for such an operation. Investment, increased production, increased productivity, and the maintenance of an adequate balance between imports and exports are factors which vitally influence changes in the availability of goods and services. In an under-developed country this is the key to avoid inflationary pressures.

## Inflation and Pakistan

Right upto 1969 the Pakistan economy had shown a remarkable resilience in bearing up with the three-pronged pressures of maintaining adequate levels of development, defence and consumption, and yet maintaining a remarkable level of price stability. The index of wholesale prices prepared by the Statistical Division of the Pakistan Government, using 1959-60 as the base year, would bear out the veracity of this statement.

*Indices of Wholesale Prices by Groups*  
(1959-60=100)

Year (July-June)	General	Food	Raw materials	Fuel, Lighting & Lubricants	Manufac- tures
1959-60	100.00	100.00	100.00	100.00	100.00
1960-61	104.77	106.30	108.20	99.10	99.23
1961-62	104.65	104.73	110.80	98.29	101.03
1962-63	102.86	99.89	110.64	98.47	150.64
1963-64	106.35	104.56	112.39	103.98	107.05
1964-65	113.55	113.10	125.99	105.29	107.19
1965-66	112.03	108.24	125.57	109.18	112.70
1966-67	124.36	126.89	126.21	120.98	117.02
1967-68	125.68	133.26	105.97	123.61	121.68
1968-69	129.54	134.04	113.19	127.37	129.75
1969-70	132.19	134.10	122.15	132.20	134.27
1970-71	137.32	136.50	133.23	137.08	142.34
1971-72	150.31	153.50	136.34	150.63	151.52
1972-73	179.74	189.05	157.81	182.20	170.75
1973-74	229.37	250.62	202.34	201.29	197.64
1974-75	308.46	325.49	341.70	353.15	304.85

In 10 years, 1958-59 to 1968-69, the general index of wholesale prices increased by 29.54 per cent (or slightly less than 3 per cent per annum); food prices by 304 per cent per annum; raw materials by 1.13 per cent per annum; fuel, lighting and lubricants by 2.7 per cent per annum; and manufactured goods by 3 per cent per annum. In the 3 years prior to 1958-59 the average annual increase in the general index of wholesale prices was 3.33 per cent per annum.

In the 6 years from 1969-70 to 1974-75 prices have increased by an average of 25 to 30 per cent per annum. The average annual increase in prices in this six-year period is equal to the total price increase in prices in the 10 years 1958-59 to 1968-69. It should be noted, though, that almost all Asian countries as well as other countries were also subjected to inflationary pressures. The changes in consumer prices compiled by the Asian Development Bank bear this out.

*Changes in Consumer Prices (1970=100)*

Name of country	Average percentage change		
	1970-72	1973	1974
Afghanistan	23	14.6	7.8
Bangladesh	10.2	49.6	39.1
Burma	4.8	30.2	25.2
Hong Kong	4.7	18.1	14.4
India	4.1	7.7	21.2
Indonesia	5.4	31.2	40.4

Malaysia	2.4	10.6	17.3
Nepal	3.1	11.4	16.5
Pakistan	4.9	20.6	28.6
Philippines	12.4	11.0	34.4
Singapore	2.0	17.7	22.3
Sri Lanka	4.5	9.7	12.3
Thailand	3.00	11.8	23.3

It would appear from the preceding table that the price increases in Pakistan has been higher than those in most Asian countries. This is seriously disturbing in view of Pakistan's enviable record of price stability between 1958-59 and 1968-69. While prices registered a significant increase between 1968-69 and 1971-72, the upward trend during the past three years ending mid-1975 poses a threat of political, social and economic unrest. It is probably the most serious problem facing the Government of Pakistan in mid-1975.

Before investigating the cause of this malaise, it should be emphasised that the maintenance of price stability between 1958-59 and 1968-69 is symbolic of the wise and judicious fiscal and monetary policies pursued in this period, as also of the mature and sound planning and development techniques which were adopted. Even in this period the country faced potential inflationary pressures generated by the huge expenditures on the Indus Replacement Works and the 1965 war with India. It so happened that the country's economic policy was well-tuned to face and successfully overcome these inflationary pressures. The stress was always on productive investment, economic growth and financial discipline.

The social sector was not given the pride of place given it by the Government of Prime Minister Zulfikar Ali Bhutto, nor was the concentration of wealth and economic power and grave inequalities in income distribution considered as a serious menace as long as the privileged and elite class contributed in full measure to economic prosperity and did not indulge in ostentatious and visibly vulgar luxury. The problem of inequality was deemed to be tackled through highly progressive income taxes, wealth tax, and death duty as well as high rates of customs duties on goods which could be classified as luxuries. Economic growth and an accelerated increase in production was supposed to take care of the rest of the problem. The private sector was sacrosanct and the public sector was only used when the private sector was unable or unwilling to undertake a particular venture.

"The old order changeth yielding place to new  
And God fulfils himself in many ways;  
Lest one good custom should corrupt the world."

Thus the seventies witnessed the emergence of a new Pakistan, a Pakistan raped and dismembered by the usurper General Yahya Khan, and yet a Pakistan which was determined to carve out a new destiny for itself. Mr. Bhutto's Government, which took over on December 21, 1971, was faced with an economy which had been seriously damaged by Yahya Khan with an administration which had been mauled and crippled by Yahya Khan, and with an eye-ball to eye-ball confrontation with an enemy which occupied large chunks of Pakistan territory and held some 90,000 Pakistani servicemen and civilians as prisoners of war. The country's external trade was in the doldrums and economic assistance to Pakistan had ceased to flow because of Yahya Khan's immoral unilateral decision declaring a moratorium on Pakistan's foreign debts. All these problems were stupendous enough for a new Government which was committed to an active economic and social policy for raising the status of workers, peasants and students and for providing roti (bread) kapra (cloth), and makan (housing) for one and all. Unfortunately Pakistan was to be plagued with further problems involving economic distress and dislocation.

The price level was subjected to considerable pressure between January 1972 and June 1973 when the price increase was of the order of about 30 per cent. This resulted from several factors:

- i) World-wide inflation hit Pakistan rather hard in particular for items such as wheat whose imported price increased from 110 dollars to 160 dollars per ton in 1972-73,

and that of imported edible oil in which the price increased from 280 dollars to 570 dollars per ton.

- ii) Monetary assets increased by 6,150 million rupees during 1972-73 on an approximate base of 20,500 million rupees. This unprecedented increase of 30 per cent in monetary assets resulted from deficit financing by Government, private sector expansion credit, and a trade surplus. The causative factors of changes in monetary assets in 1972-73 are shown below.

	(Million rupees)
a) Government sector	+ 2263.6
b) Private Sector	+ 1708.0
c) Foreign Trade	+ 2347.5
d) Net impact of other factors	— 16.57
Total effect	+ 6153.4

- iii) The People's Government resorted to deficit financing in order to meet its commitments in the areas of social reforms, defence, and essential physical infrastructure. The increase in the monetary assets reflecting the additions made on account of the government-metal sector including the State Trading Corporations added upto 2263 million rupees, and this significantly contributed to increases in money incomes and the generation of inflationary pressures.
- iv) Growth of money incomes was at a much higher rate than the increase in availability of goods. During 1972-73 the gross national product increased by 6.5 per cent, but well over one-half of this increase consisted of service incomes rather than physical products. The increase in money incomes was occasioned by higher salaries for the lower paid government servants, increased agricultural incomes on account of increase in world prices and higher procurement prices (wheat and sugar cane procurement prices were increased), and increased income from the export sector.
- v) The decision to devalue the Pakistan rupee in May, 1972, led to higher cost of imports, particularly those of industrial raw material, spare parts, transport and power equipment plant and machinery inputs for the agricultural sector, especially fertilizers; key food items like wheat and edible oil; defence equipment; increased debt servicing charges which also had a grave effect on the cost of production of public utilities and industry in general; and reduced domestic availabilities of exportable commodities. Pakistani onions, potatoes, meat, chicken, eggs, fresh fruit and vegetables, pulses and a host of other items of common consumption found their way into the export market, much to the discomfit of the Pakistan consumer. Major exports like rice, and cotton and cotton products received a great thrust in their quest for foreign markets as a result of world-wide inflation and the devaluation of the Pakistan currency. Domestic availability of these goods was reduced and domestic prices too being influenced by export prices registered an upward trend. Both producers and traders shared in this boom, and the earnings of the private sector during 1972-73 increased by over 2,500 million rupees as a result of the export boom during this year.

As if all this was not enough the flood that came in 1973 further damaged the economy Prime Minister (then President) Bhutto, as an astute politician, clearly foresaw the impending dangers and directed the administration in early August 1973 to take stringent measures for combating inflation, and to tackle it boldly and with a spirit of genuine self-denial. Either the spirit was not willing or the flesh was weak, but it now appears that the people who served Mr. Bhutto did not seriously attempt to understand the far-reaching implications of his orders. Anti-inflationary action, to be effective, is of necessity composed of unpopular measures which require discipline and self-denial. The political power of the day was prepared to take unpopular decisions, a situation which would be the envy of most economic administrations in other countries. The timing of this decision was quite appropriate, and if Mr. Bhutto's orders had been implemented it would have made for a classic illustration of a popularly

elected government taking firm unpopular anti-inflationary measures and nipping the inflationary threat while it was still young and tender. But it was not to be so. Let us see what happened between 1973 and 1975.

In 1973 the National Assembly passed the Cost of Living (Relief) Act providing for the monthly payment of 35 rupees per month to all employees throughout the country drawing wages upto 700 rupees per month with marginal adjustments up to 735 rupees per month. Pensions were also increased by 35 per cent, subject to a maximum of 35 rupees per month.

This was in effect a price/wage packet because it increased the issue price of wheat from 17 rupees to 22 rupees per maund, of vegetable ghee from 4.75 rupees to 6 rupees per seer, of wheat procurement from 17 rupees to 22.50 rupees per maund, of coarse rice procurement by one rupee and of Basmati rice procurement by 2 rupees per maund, and finally of urea from 35 rupees to 42 rupees and then to 55 rupees per bag of 110 pounds, and that of D.A.P. from 32 rupees to 33 rupees to 44 rupees and then to 57 rupees per bag of 110 pounds respectively. It was a case of robbing Peter to pay Paul and the net budgetary effect of the package for 1973-74 was to increase money incomes by 100 million rupees as under:

	Million rupees
Additional salary bill (10 months)	—530
Addition to pensions	— 25
Additional cost of rice procurement	— 25
Additional cost of wheat procurement	— 80
Reduction in fertilizer subsidy	+310
Reduction in wheat subsidy	+250
	<hr/>
Net effect	—100 million rupees

On the 8th June, 1974, a new cost of living allowance at the rate of 10 per cent of wages, subject to a minimum of 50 rupees per month and a maximum of 150 rupees per month, was announced to offset the impact of high prices. In April 1975, another increase of 25 rupees per month was announced to compensate for the increase in the issue prices of wheat, vegetable ghee and sugar. The wage increases of 1974 were accompanied by increasing the procurement price of wheat from 22.50 to 25.50 rupees per maund, of vegetable ghee from 6 to 7.5 rupees per maund, of urea from 55 to 75 rupees per bag, and of DAP from 57 to 75 rupees per bag.

The wage increase packet of April 1975 was announced with a great fanfare of trumpets, implying that the economy would be destroyed if the wheat and vegetable oil subsidies were continued. The procurement price of wheat was increased from 25 to 37 rupees per maund and its issue price was raised from 25.50 to 32 rupees per maund. Vegetable ghee prices were increased from 7.50 to 9 rupees per seer and those of sugar from 3.50 to 4 rupees per seer to offset the increase in the procurement price of sugar and also to provide additional revenue. Within the space of two years the price of wheat and vegetables had increased by about 100 per cent, that of fertilizers by 150 per cent and that of wheat procurement by 85 per cent, and that of sugar by 6 per cent. Wages had increased by about 110 rupees per month in this period. The functionaries of government had obviously opted for the easy way out of picking out three or four essential items and controlling their prices. Fortunately they did not opt for an easier alternative to forget completely about price stability and institutionalise inflation by such measures as periodic adjustments of salaries, pensions, Government bonds and other fixed-value items. They did not undertake the really effective way of combating inflation through avoiding deficit financing, large increases in non-developmental and unproductive expenditure, and other income-generating activities of an inflationary type. They did not even attempt to correct the very basic causes of the malaise which lay primarily in the prevailing par value of the Pakistan rupee and stagnation in industrial and agricultural production.

It would be interesting to compare the net annual impact of the 1973, 1974 and 1975 wage price packets on the initial increase in incomes per annum.

Item	Year (Million rupees)		
	1973	1974	1975
Additional salary bill	-640	-1,600	-1,000
Additional wage bill	-630		
Addition to pensions	-25		
Additional procurement cost of :			
i) rice	-25	—	—
ii) wheat	-80	—	—
Reduction in fertilizer subsidy	+310	—	—
Reduction in wheat subsidy	+250	—	+690
"    "    vegetable ghee subsidy	—	+470	+470
Net increase from sugar	—	+260	+350
POL products, Gas and power	—	+564	+650
Net impact	-840	-306	+1160

Monetary assets continued to increase during 1973-75 but not at the alarming rate witnessed in 1972-73, although the rate of increase during 1974-75 was some three times higher than that in 1973-74.

*Causative factors affecting monetary assets*

	(Million rupees)	
	1973-74	1974-75
i) Government sector	-46.9	2828.2
Commodity operations	+444.5	+1411.6
Budgetary support	-491.4	+1411.6
ii) Private sector	+2601	+3751.7
iii) Foreign Trade	-436	-654
iv) Other factors	-255.8	-317.3
Total effect on monetary assets	+1862.3	+5608.2

During 1974-75 deficit financing amounted to 2828.2 million rupees which was equally divided between budgetary support proper and for subsidising the prices of commodities by the Federal Government. The 1974-75 budgets of the Federal and the Provincial Governments were characterised by requests for supplementary grants which, quantitatively speaking, rivalled the original budget estimates. It was either a case of gross financial indiscipline or that of irresponsible budget estimation. During 1972-75 money supply increased by 13,624 million rupees. This increase alone was about 65 per cent of the total monetary assets in Pakistan in mid-1972. This large-scale increase in money incomes and money supply was hardly matched by an increase in physical products from the agricultural and industrial sector as would appear from the following Table.

Sector	Growth rate per cent per annum (1959-60=100)	
	1973-74	1974-75
Agriculture	+5.4	-2.2
Manufacturing	+6.1	+3.0
Construction and other services	+16.1	+19.9

The share of the service sectors in the gross national product continues to increase and this, accompanied by stagnation in industrial and agricultural production, generates inflationary pressures.



Prices of imported goods, like wheat and edible oil, have started coming down and in mid-1975 stood at about 130 dollars and about 385 dollars per ton respectively as compared to 160 dollars for wheat and 570 dollars for edible oil during 1972-73. Prices of industrial raw material, like iron and steel and copper, have also come down substantially in international markets but it is doubtful if the benefits will be passed on in full to the consumer in the immediate future as the State Trading Corporation has huge stocks of these items purchased in large quantities as a result of panic buying when prices were at their peak. This situation is also true with respect to the purchases of edible oil made by the State Trading Corporation. Oil prices are threatened with further increases and this could add to Pakistan's difficulties; during 1974-75 oil imports accounted for foreign exchange expenditure of 387 million dollars as against 65 million dollars in 1972-73, and 225 million dollars in 1973-74 for an approximately tonnage of oil which increased at the rate of 10 to 12 per cent per annum. With respect to most of the manufactured goods imported by Pakistan, the price position should ease up relatively in the coming years.

On the credit side it must be said that the Government did attempt to take anti-inflationary measures. These included a ban on the export of items such as meat, potatoes, onions, etc; regulation of cotton exports, keeping in view the domestic requirements of the textile industry; increased efforts for securing foreign aid and loans particularly from the OPEC (oil producing and exporting countries); attempts to increase production of rice, wheat, oilseeds, sugarcane, pulses, vegetables, and cotton; establishment of fair price shops and utility stores for government employees; promotion of consumer's cooperatives, super-markets and cold storages; floating of short-term debentures and increasing the rate of interest on various national savings schemes to mop up liquidity; liberalisation of imports, withdrawal of import duties on foodstuffs, particularly tinned milk, vegetables and meat preparations; and, finally, a statement of pious intentions to enforce strict budgetary discipline and avoid deficit financing.

The State Bank of Pakistan has also raised the Bank Rate to 9 per cent and enforced a number of selective credit controls on advances against food items, raw material to manufacturing units, raw material to traders, finished goods to manufacturers, and finished goods to traders, and also on margins required for letters of credit.

By mid-1975 inflationary conditions had reached such a pitch in Pakistan that sharp and deep surgery was required. An anti-inflationary action programme calls for, inter alia, the following:

- i) Upward revaluation of the Pakistan rupee and a policy package covering fiscal policy, including customs duties, monetary measures, price and incomes policy, trade policies, industrial, agricultural and labour policies which should support this action. Stand-by arrangements should be firmed up for meeting a short-term crisis in the balance of payments, but this is not really essential.
- ii) A reinvigoration of the work ethic and the absolute necessity of maintaining labour discipline, both in the urban as well as the rural areas.
- iii) Increasing industrial and agricultural production through concerted efforts which should identify each and every bottleneck hampering the growth of the production and take immediate and effective remedial action. Red tape should be avoided at all cost.
- iv) Identifying the shortcomings of the economic infrastructure which is almost wholly in the public sector with a view to removing them. This includes power, transport and communications, and ports.
- v) Restoring the confidence of the private sector engaged in industry and agriculture. The problems of the private sector in this respect are well-known and do not merit repetition, except to say that governmental assurances should be solemnly made and also solemnly kept.
- vi) Social sector projects should be appraised with the greatest care and wastage of any sort should be avoided. Priorities should also be laid down clearly and precisely.
- vii) Projects with lower gestation periods should be given priority, particularly those which create goods and services for consumption.

- viii) The programme for the development of heavy industry should be carefully appraised with reference to our requirements, cost of production, saving in foreign exchange, and provision of employment opportunities particularly those requiring technical expertise.
- ix) Industries run by the public sector should be run on a sound commercial basis and their management, while enjoying autonomy, should also be accountable in terms of net profit and the quantity and quality of production. The extent of protection and other privileges extended to the public sector should be on approximately the same level as those extended to the private sector. The public sector management has a graver responsibility for being cost conscious and aiming to reduce the cost of production through increased productivity, as they are really playing with other people's money. When a bag of cement, which is produced by the public sector and whose price is controlled by government at 16 rupees a bag, is openly black-marketed in the Federal Capital of Islamabad at 25 to 30 rupees a bag (and that, too, 20 per cent empty), there is obviously something seriously wrong with the management of the cement industry. State Trading Corporations should also operate on a strictly professional and commercial basis.
- x) Severe cuts in the cost of civil administration at all levels. Both the central and provincial governments are grossly over-staffed and could do with a lot of pruning.
- xi) Strict instructions to the State Bank of Pakistan not to allow monetary expansion except to the extent warranted by an increase in productive economic activity. Similarly, instructions should also be issued to the nationalised commercial banks and the specialised credit institutions.
- xii) Reduction in the Bank Rate to make credit cheaper for productive economic activity.
- xiii) Effective collection of government revenue at all levels. The tax structure should not be evasion-oriented.
- xiv) A progressive move towards eliminating price and distribution controls.
- xv) Limiting political patronage in the economic sphere to the lowest limit commensurate with an elected political government.
- xvi) Law and order is an essential prerequisite of a civilised society and should be maintained irrespective of party affiliations. Institutions like the income tax and land revenue departments should never be misused.
- xvii) Rigorous overall planning with a view to laying down general and detailed priorities, and identification and development of individual projects. It should be emphasised that the Pakistan economy is a man-made and man-planned economy; of course the Divine will is omnipresent. The discipline of the Plan should be maintained, although the Plan itself should be flexible enough to accommodate unforeseen situations emanating from the international scene.

## **Monetary Systems, and the Role of Banking in Economic Development**

Monetary system refers to a system in which a particular type of money is in use and includes all the policies, practices, regulations, etc. concerned with that money. The main types of monetary systems which have been used are BIMETALLISM and MONOMETALLISM, GOLD STANDARD AND MANAGED MONEY. MONOMETALLISM is the system of money in which the unit is legally defined in terms of one metal only, usually gold. Under Bimetallism the unit is legally defined in terms of two metals, both of which are legal tender and with a fixed rate of exchange between them. The metals concerned are usually gold and silver, and the double standard is used to reduce fluctuations in the value of money. In practice the main difficulty is the maintenance of a fixed price ratio between the two metals. Efforts were made to popularise bimetalism during the latter part of the 19th Century but they failed.

The GOLD STANDARD was the dominant international monetary system before 1914

and implied the measurement of values in terms of gold. A country was said to be on the gold standard when its monetary system was defined in terms of gold of a certain weight and fineness, and where Gold coins were legal tender and circulated freely. Monetary authorities were willing to accept bullion and convert it into coins. Gold could be freely bought and sold and exported and imported, and the value of other forms of money was maintained at par with gold coins. Gold could be demanded as a matter of right in exchange for paper money, and the supply of gold possessed by a country on the gold standard had to be strictly related to the supply of money. This aspect of the gold standard led to fluctuations in prices as the supply of money was in indirect proportion to the stock of gold. Further, the demand for gold in exchange for other forms of currency could lead to the suspension of the gold standard and it did indeed do so in the U.K. in 1914. In times of difficulty, as happened in the aftermath of the first World War (1914-18) gold was needed for financing imports when the country was unable to maintain a certain level of exports. This diversion of gold for meeting international obligations led to a fall in prices on the domestic front where the currency in circulation had to be related to the availability of gold reserves. International indebtedness following an unfavourable balance of payments had to be settled in gold, and in consequence the stocks of gold diminished. This had a direct effect on the supply of money available in the country and led to a reduction in the amount of notes and gold coins. The banking system assisted in the policy of deflation through raising the bank rate and open market operations. The amount of bank deposits were also reduced. This resulted in a fall in the level of prices, exports were stimulated, and imports reduced. The increase in the volume of exports reduced the pressure on the balance of payments, and the balance of payments position once again became comfortable. This implied that more gold flowed into the country, the supply of money increased, prices went up, exportable goods became dearer and therefore, declined, imports increased, and the balance of payments position became less favourable. This briefly was the "automatic" nature of the gold standard system, and it indicates the rules which had to be observed for it to operate in a fully self-balancing way. The gold standard operated quite fully in the 19th Century, but later the Central Banks became more and more reluctant to permit the outward movement of gold as it had a direct effect upon the internal economy of the country. Other factors which brought down the gold standard were the imposition of tariffs and other barriers designed to impede the flow of imports, the substantial movements of gold which were designed to obtain a higher price prevailing elsewhere rather than for settlement of international indebtedness, and the widespread resistance to reduction in incomes when a loss of gold dictated a deflationary policy.

Of course, the gold standard did have some advantages. It provided an effective control over the expansion of bank credit and made an over-issue of paper money impossible. The International gold standard provided an objective standard of value and gave stability to the exchange rates.

Another version of the gold standard was the **GOLD EXCHANGE STANDARDS** under which system gold did not circulate internally and currency was not directly convertible into gold but into some foreign currency which was convertible. This was done as reserves, securities and other assets of the country which was on the gold standard could be held. These reserves unlike gold could earn interest but at the same time be as good as gold. The disadvantage of the system was its dependence on a country which might itself give up the gold standard.

The gold standard went into disuse within a decade or so of its rehabilitation after the first World War. Until a few years ago, the United States Government had given a pledge to convert the foreign holdings of United States dollars into gold at the rate of 35 dollars an ounce.

Later on the US Treasury indicated its unwillingness to convert such dollars into gold and the price of gold was fixed officially at a lower rate per ounce. The fate of gold has fluctuated in several directions in recent years. One such arrangement was that gold transactions between central banks would be undertaken at the official US price for gold while all other gold transactions would take place at the free market price of gold. Recently the United States has started auctioning a part of its gold reserves at prices ranging from 160 dollars to 175 dollars an ounce. Gold still occupies an important position in the international monetary structure.

International payments can still be made in terms of gold. The arrangements of the International Monetary Fund have also given a new lease of life to gold. Under the IMF arrangements gold still keeps the rates of exchange stable when gold parities are being altered; a temporary balance of payments deficit can be met by gold transfers as a stop-gap arrangement, and finally gold gives a common denominator for different currencies although this aspect of gold is being replaced by SPECIAL DRAWING RIGHTS of the International Monetary Fund. SPECIAL DRAWING RIGHTS are a "basket" of 16 of the leading currencies of the world and provide a more stable unit of comparison than gold or the US dollar. In mid-1975, one unit of SDR was equal to 1.25 US dollars.

MANAGED MONEY is the Currency system where the amount of the money is regulated arbitrarily by the monetary authorities in order to achieve some objective, such as the stabilization of the price level. Unlike the gold standard, a managed currency does not determine the quantity of money by any predetermined means. Managed money is mostly paper money and it is not freely convertible, although it may or may not be partly secured by coins or bullion. Managed money is also sometime called a "fiat standard". Under this system the note issuing agency is generally the Central Bank. At one time, notes were issued on the CURRENCY PRINCIPLE which insisted on 100 per cent reserves for every note issue. Bank notes were regarded merely as a convenient and more economic substitute for metallic money. This made the system of issuing notes highly inelastic and it suffered internally from the same disadvantages as being on the gold standard. It was, therefore, given up. Although in some countries (not Pakistan) the note issuing authority has to keep a certain percentage of notes issued in the form of gold or strong foreign currencies and securities. Managed money is now the order of the day and the issue of notes is left almost entirely to the discretion of the Central Bank.

This is called the BANKING PRINCIPLE and it enables the Central Bank to vary money supply in response to the legitimate needs of the economy. Reserved requirements are not generally laid down by law. The Banking Principle has provided for greater elasticity in money supply and assisted in the pursuit of an effective monetary policy. The Banking Principle relies heavily on the sense of responsibility of the monetary authorities and irresponsible action in this regard by the Central Bank could lead to unmitigated disaster.

Managed Money is not here to stay as the monetary system of the world. SPECIAL DRAWING RIGHTS are playing an increasingly larger role in servicing as monetary reserves and as modes of accounting in international transactions. The system can work provided a reasonable measure of stability is maintained in internal prices and in the external value of currencies. The system avoids wastage by using a cheap medium of exchange, provides a high degree of elasticity to monetary expansion and contraction, and helps in establishing a relatively simple and understandable system. This analysis is of course based on the assumption that large and persistent deficits in the balance of payments can be avoided and that the prices of the main imports of a country or region do not increase to an intolerable degree as compared to the prices which it can secure for its exports.

## **Role of Banking in Economic Development**

The Banking system plays a vital role in economic development in all countries with mixed economies as G.D.H. Cole has well remarked:

"The banking system which a country needs depends on the general structure of the economic institutions in which it is required to fit. In a country such as the Soviet Union, where production and distribution are owned either by the State or by some sort of 'collective' and administered in accordance with a public economic plan, it is plainly logical and natural for the banks to be public institutions and for the entire credit as well as its total amount to be settled as part of the plan."

Capital formation is the principal requisite for economic development and, in the case of developing countries, is the main hurdle in the way of accelerated economic growth. In these countries the lower level of income makes it all the more difficult to mobilize savings. But

the need for the mobilization of such savings is urgent. It is here that the banking system plays an extremely useful role in securing deposits which can, in turn, be put to productive use. With economic development there is a substantial increase in credit requirements, both for trade and investment. The pressure of demand for short, medium and long term credit grows at a compound rate which has to be satisfied by the banking system in order to maintain and expand economic activity. The banks attract deposits by offering world-wide services and attractive rates of interest. Thus, hoarded or inactive money is channelled into productive use and lent out for worthwhile enterprises. Thus Banks not only mobilize the financial resources; they also direct their flow into desired channels. The banking system and economic development are closely and intricately interwoven as economic development has direct implications for incomes, consumption and income distribution patterns, and these in turn have a direct bearing on the process of savings, capital formation and the banking system as a whole.

## **National Banking and Credit Institutions**

The development of banking and Credit Institutions in Pakistan has been quite remarkable particularly because such institutions, as existed in pre-partition days, were predominantly in the hands of Hindus who left Pakistan shortly after its establishment. In March, 1947, there were 487 branches of scheduled banks in the areas that now constitute Pakistan; these were reduced to 81 by the end of June 1948. The banking system of the newly-established State of Pakistan was largely dependent on 19 non-Indian foreign banks whose policies were firmly controlled by their headquarters.

The only Pakistani institutions were the Habib Bank, which transferred its head office from India after the announcement of the decision to establish Pakistan, and the Bank of Australasia with its head office at Lahore, which started functioning in June, 1947.

The Reserve Bank of India and its agent, the Imperial Bank of India, would not cooperate with the Government of Pakistan although the interim agreement provided that Pakistan would take over the management of the public debt, exchange control and other functions of central banking from October 1, 1948. Routine banking functions such as receiving deposits and cashing cheques were also blithely ignored, leave alone advancing money against government securities and handing over the 750 million rupees as Pakistan's share of the cash balances of undivided India with the Reserve Bank of India. It was in these conditions that the State Bank of Pakistan was established.

## **State Bank of Pakistan**

The State Bank of Pakistan was established and inaugurated by Quaid-i-Azam Mohammad Ali Jinnah on July 1, 1948, and the interim agreement on banking terminated three months ahead of schedule:

One of the first tasks of the State Bank was to arrange for the issue of Pakistani notes and the withdrawal of the Reserve Bank of India notes which had continued to circulate in Pakistan during the transitional period. The first Pakistani notes were issued in October, 1948, in the denominations of Rs. 5, 10 and 100. The withdrawal operation took about 15 months.

Another important problem to which the State Bank addressed itself was that of establishing a national banking system. It recommended to the Government to set up a new banking institution to serve as an agent for the State Bank of Pakistan as well as the spearhead of its credit policies. The Government accepted the suggestion and agreed to participate in the share capital of the proposed bank to the extent of 25 per cent. Originally, the establishment of the bank was scheduled for the year 1950 but the date had to be advanced after the trade deadlock with India following Pakistan's decision not to devalue her currency and India's refusal to recognize the new par value of the Pakistani rupee in relation to the Pound Sterling which had been devalued. Accordingly, the National Bank of Pakistan was set up under an Ordinance in November 1949. The State Bank also helped the Habib Bank to expand its organization. At the same time, it took necessary steps to

weed out weak institutions and to clear the field by removing or disarming unsound banks. The State Bank also took steps to develop a money market and to create a gilt-edged market. The Banking Companies (Control) Act was passed in December 1948, specifically empowering the State Bank to control the operations of the banking companies in Pakistan.

Thus banking got off to a very good start under the imaginative and wise guidance of patriotic people of undisputed integrity like the late Mr. Zahid Hussain (first Governor of the State Bank), the late Mr. A.R. Muhajir (first head of the National Bank of Pakistan), and the late Mr. Mohammad Ali Habib who guided the fortunes of the Habib Bank in its formative years. It is a matter of good fortune for the country to have had a succession of good Governors at the State Bank with one solitary exception who was removed by Mr. Bhutto's Government.

The State Bank of Pakistan functions as a bank of issue, as a banker to the Government, as a banker to other banks (or as a banker's bank), as controller of credit, as manager of foreign exchange, and as an adviser to the Government of Pakistan. The State Bank is prohibited from doing the following business:

- (a) to engage in trade or otherwise have a direct interest in any commercial, industrial or other undertaking except such interest as it may in any way acquire in the course of the satisfaction of any of its claims and such interest shall be disposed of at the earliest possible moment;
- (b) to purchase its own shares or the shares of any other bank or company or grant advances or loans upon the security of any such shares;
- (c) to advance money on the mortgage or on the security of immovable property or documents of titles relating thereto;
- (d) to become the owner of any immovable property except where ownership is necessary for the use of the Bank;
- (e) to make unsecured advances or loans;
- (f) to draw or accept bills payable otherwise than on demand; and
- (g) to allow interest on deposits on current account.

I have drawn extensively on the experience of Dr. S. A. Meenai, who has worked for the State Bank for some 25 years, in elaborating on the functions of the State Bank.

As the controller of credit, the State Bank has extensive powers. It is responsible for regulating credit as warranted by the exigencies of the changing economic situation and line with the objectives laid down in its Act. In addition to the traditional instruments of credit control, such as the Bank Rate and open market operations, it has available to it a number of other weapons. The State Bank of Pakistan Act allows varying of the minimum reserve requirement of scheduled banks whenever circumstances so require. The Bank also enjoys comprehensive powers of selective and direct credit regulation. The powers vested in it include the right to regulate policies in respect of advances made by commercial banks in general or by any specific bank or banks in particular. It can also fix the margin to be maintained by the commercial banks in respect of secured advances and may also fix the rate of interest to be charged and the maximum limit upto which unsecured advances can be made.

The State Bank enjoys wide powers for ensuring the soundness of the banking system. No bank can be established in the country and no existing bank can open a new office in the country without the approval of the State Bank. The Bank also undertakes the inspection of banks with a view to ensuring that sound banking practices are followed and the depositor's interest is fully protected. It can also give directions to a commercial bank pertaining to any matter concerning its business and may call for any information in respect of its business. No scheme of amalgamation of banking companies can be effected without the approval of the State Bank. The State Bank can prohibit an unsound bank from accepting fresh deposits. It can also move the court for the liquidation of a bank which fails to fulfil the various legal requirements. If the liquidation of a bank is ordered by a court, the State Bank can apply to the court and assume responsibility for the liquidation proceedings.

Being responsible for maintaining the external value of the rupee, the State Bank also administers exchange control in the country. This task is two fold. On

the one hand, it ensures that all foreign exchange receipts are accounted for and surrendered to the authorities and, on the other, it allocates and rations foreign exchange in line with set priorities. It performs this function as the agent of the Government and in close consultation and liaison with them. The basic decisions are made by the Government through a high-powered committee, known as the Exchange Control Committee, consisted of the representatives of various Ministries and the State Bank, which also draws up the foreign exchange budget.

The State Bank has licensed a number of banks as authorised dealers to hold foreign exchange and to deal in it at authorised rates, subject to its directions. The authorised dealers are required to submit periodical returns to the Bank which are ultimately used in the compilation of balance of payments statistics. It also administers the Export Price Check in order to safeguard against the possibility of under-invoicing.

The Bank is not responsible for controlling imports directly. Import licensing is conducted by the Government. Once the import licence is issued, exchange payment becomes automatic. All import licences are required to be registered with the State Bank before the banks are allowed to open any letter of credit. A foreign exchange budget is prepared annually and reviewed bi-annually by a government committee on which the State Bank is represented. The idea behind this system is to help in planning the foreign exchange expenditure and to keep the foreign exchange commitments under constant review.

At present, Pakistan's exchange control applies to all countries except Nepal, Tibet and Afghanistan. The Bank exercises full control in respect of invisible payments, including the release of exchange for business travel, medical treatment and education. For this purpose, quotas are fixed and criteria laid down for the grant of the exchange facilities in consultation with the Government. The Bank is the custodian of the country's foreign exchange reserves. By virtue of the membership of the sterling area, the bulk of the foreign exchange reserves are held in sterling and the exchange parity of the rupee is maintained through spot and forward operations in sterling.

The Bank under its Act is charged with the responsibility of maintaining an expert staff to study all questions of agricultural credit and of being available for consultation by the Central Government, Provincial Governments, provincial cooperative banks and other banking organisations. Since 1960 the Bank has operated a Rural Credit Fund to which are credited appropriations from the profits of the Bank. The Fund is intended for making medium term loans and advances to cooperative banks repayable within a period of three years against such security as the Bank may prescribe. The Fund can also make advances to other rural credit agencies.

The State Bank also acts as an adviser to the Central and Provincial Governments on financial and economic matters, particularly with reference to their monetary aspects. This advice is tendered on matters like agricultural credit, cooperation, industrial finance, exchange control, banking and credit control, mobilization of savings, financial aspects of planning and development and other economic issues. In fact, the Bank's advice may sometimes be sought on matters even farther afield.

The Bank collects comprehensive statistical information on money and banking, balance of payments, foreign investment and other allied subjects. The Bank issues a weekly press communique on the affairs of the scheduled banks and also a weekly statement on its own affairs. It also publishes a Monthly Bulletin. The State Bank is the sole authority for the issue of notes in the country, with the exception of one rupee notes and rupee and subsidiary coins, which are issued by the Central Government. According to the State Bank of Pakistan Act, 1956, the note issue was based on a proportional reserve system. The entire amount representing the notes issued had to be backed by an equivalent amount of assets, of which not less than 30 per cent was required to be maintained in the form of gold coins, gold bullion, silver bullion and approved foreign exchange. The remaining assets were required to be held

in the form of rupee coins, rupee securities and such bills of exchange and promissory notes as are eligible for purchase by the Bank. The requirement relating to the maintenance of a minimum amount of gold coin, gold and silver bullion and approved foreign exchange could, however, be suspended by the Bank with the previous sanction of the Central Government for a period not exceeding 30 days, in the first instance, which could be extended from time to time by periods not exceeding 15 days. There was only one occasion for resorting to this provision of suspension when the assets held by the Bank as currency backing remained in excess of the minimum requirement laid down in the Act.

The 30 per cent currency reserve requirement was modified through an Ordinance in November, 1965. The Ordinance lays down that of the total amount of assets, assets of such value as the Central Government, in consultation with the Bank, may, by notification in the official gazette specify shall be held in gold coins, gold bullion, silver bullion or approved foreign exchange. After this Ordinance there was no statutory limitation on the State Bank, and therefore Government's authority to create monetary assets and money supply. Small wonder that monetary assets increased by 65 per cent between 1972-75.

For discharging its currency issue function, the Bank maintains four offices of issue at Karachi, Dacca, Lahore, and Peshawar and a number of currency chests spread all over the country. These currency chests remain in the custody of the officers of the National Bank of Pakistan or the Treasury Officers. This system obviates the inconvenience of frequent physical transfer of funds from one place to another and the Government treasury and sub-treasuries are able to operate with relatively small cash balances as they are always able to replenish their cash quickly by transfer of money from the currency chest. It also helps in the provision of remittance facilities at a nominal cost.

The State Bank also acts as banker to the Central and Provincial Governments. The Central and Provincial Governments are required to deposit, free of interest, all their cash balances with the Bank. It accepts Government deposits, cheques and drafts and undertakes the collection of their cheques and drafts drawn on other banks and provides cash to them. It debits their accounts with the amounts of cheques or vouchers drawn by Government on the State Bank and presented for encashment by other parties. It transfers Government funds from one place to another and manages the public debt of the Central as also the Provincial Governments. In places where it does not have its own office, the State Bank has appointed the National Bank of Pakistan as its agent for conducting Government business. The Bank charges no commission from the Government for services rendered to them except for the management of public debt, though it pays commission to the National Bank of Pakistan for acting as its agent. The Bank pays no interest to Government on their balances which are required by law to be kept with the State Bank. The work relating to the keeping of Government accounts is handled in the Public Accounts Department of the State Bank. Apart from the issue of permanent public debt, the Bank also sells Government treasury bills on tap or tender and National Prize Bonds.

The Bank makes ways and means advances to the Central as well as the Provincial Governments which are repayable not later than three months. These advances are made without any collateral security. In addition, loans are also granted to Provincial Governments against the collateral of Central Government securities. Limits for such advances are fixed by the State Bank from time to time.

The State Bank may also hold Central and Provincial Governments' securities in its Issue and Banking Departments by subscribing to them at the time of their issue or in the process of open market operations. It also lends against ad hoc securities created for the specific purpose of obtaining financial assistance from the State Bank. A limit was set on the holding of Government securities in the Issue Department by the provision in respect of the minimum holding of gold and silver or approved foreign exchange. This no longer holds after the Ordinance issued



in 1965 modifying the currency-backing requirement. In the Banking Department, the value of Government securities should not exceed the aggregate amount of the share capital of the Bank, the Reserve Fund and 60 per cent of the liabilities of the Banking Department in respect of deposits.

The State Bank also functions as the banker's bank and the lender of last resort. It maintains a very close relationship with the commercial banks. All scheduled banks are required to maintain a minimum (variable) reserve with the State Bank, the present requirement being 5 per cent of demand and time liabilities. At the same time they are entitled to loan and rediscount facilities from the Bank. These facilities are ordinarily provided by the Bank against Government securities, trade bills maturing within 90 days, agricultural bills drawn or issued for the purpose of financing seasonal agricultural operations or the marketing of crops within 15 months. These are essentially short-term loans and are advanced to enable the scheduled banks to meet their temporary requirements of funds arising out of seasonal expansion in trade, commerce and agricultural operations. The Bank is also empowered to discount bills having a maturity of upto 5 years drawn and issued for the purpose of financing agricultural and industrial development. It is further permitted to make loans to institutions and banks especially set up for the purpose of promoting agricultural or industrial development and to cooperative banks. The Bank is also authorised to purchase, hold and sell shares and debentures of any banking company or of any financing corporation and institution established to promote the economic development of any specific area and any corporation constituted for the purpose of stimulating agricultural or industrial development in the country. It is also empowered to lend against securities specified in the Act to parties other than banking companies and to banking companies against any security which it considers sufficient.

The State Bank of Pakistan was a Government-cum-Shareholders bank until the end of 1973, effective from January 1, 1974, the Banks (Nationalisation) Act also covered the State Bank of Pakistan, Agricultural Development Bank of Pakistan, and Punjab Provincial Cooperative Bank. Now the Central Government owns all the 300,000 shares with a paid up capital of 30 million rupees. Until 1973 Government's share amounted to 51 per cent of the total share capital of Rs. 30 million.

As the years have gone by Government has substantially increased the extent of its direction over State Bank activity to the point where all important decisions are taken in consultation with Government, if not at the actual behest of Government. This detracts quite seriously from its autonomy. While Government can, and indeed should have, the authority to determine monetary and credit policies, yet the independence and special status of the State Bank should be preserved by Government giving due weight to the advice tendered by the State Bank on policy matters and in case interfering in its day to day affairs and administration. The Governor and Deputy Governor are Government appointees and should be quite conscious of their legitimate responsibilities to the Government of the day. Apart from the enormous increase in monetary assets between 1972-75 which cannot by any means be justified by the extent of expansion in productive Economic activity, the State Bank should come in for critical comment on its failure to establish a worthwhile money and capital market as also a broad enough base for its open market operations.

## **Commercial Banking**

The development of commercial banking on sound and professional lines had been a significant factor in the economic development of Pakistan particularly its trade and industrial sectors. These banks played a crucial role in mobilising savings and deposits and then in channeling them in productive investments. It would be of interest to compare their performance between 31 December 1965 and 31 December 1973 when they were nationalised. The source of these key indicators is the Economic Survey 1974-75 published by the Ministry of Finance.

Key indicators of all scheduled banks in Pakistan	31 December 1965	31 December 1973
	(Million rupees)	(Million rupees)
i) Capital	270.2	503.2
ii) Reserves	123.8	375.1
iii) Non-banking demand deposits	3818.1	11759.9
iv) Non-banking time deposits	3490.2	10198.4
v) Advances other than those to banks	6235.8	17338.4
vi) Investment in shares and securities	1932.8	6533.1
vii) Bank premises	67	280.1

Pakistani commercial banks were nationalised from the 1st January 1974. The objectives of nationalisation were:

- i) To direct banking activities towards national socio-economic objectives.
- ii) To distribute bank credit equitably to different classes, sectors and regions.
- iii) To coordinate banking policy in various areas of feasible joint activity without eliminating healthy competition among banks.
- iv) To ensure safety and security of deposits of account holders.

A Pakistan Banking Council, consisting of a Chairman, a Deputy Governor of the State Bank, an official of Finance Division and three other members appointed by the Government, has been set up to make policy recommendations to the Government for directing banking activities towards national socio-economic objectives, to formulate policy guidelines for banks, to lay down performance criteria, to evaluate their actual performance in the light of these criteria and to determine the areas of coordination among banks.

The Banking Council, in consultation with the State Bank, formulated "The Banks Amalgamation Scheme 1974" which was approved by the Government and came into effect on June 30, 1974. Accordingly, the banks were reorganised into five units:-

- i) The National Bank of Pakistan.
- ii) The Habib Bank Limited.
- iii) The United Bank Limited.
- iv) The Muslim Commercial Bank Limited.
- v) The Allied Bank of Pakistan.

The banking structure remains predominantly Pakistani. Out of a total of 4,485 bank branches at the end of March, 1975, the number of branches of Pakistani banks was 4,449 or 99.2% of the total. Pakistani banks also accounted for 91.8% of total bank deposits and 92.5% of the total bank credit in the country.

Compensation is being paid to the share-holders of nationalised banks in the form of interest-bearing bonds redeemable within a period of 15 years. The compensation is based on the break-up value of the shares at the time of nationalisation and has been worked out by auditors. It ranges from zero for the Bank of Bahawalpur, Lahore Commercial Bank and Standard Bank, to 36.31 rupees for National Bank of Pakistan (for a paid-up value of 10 rupees), 10.58 rupees for the Habib Bank (for a paid-up value of 5 rupees), 19.04 rupees for Muslim Commercial Bank (for paid-up value of 10 rupees), and 19.53 rupees for United Bank (on a paid-up value of 10 rupees).

The nationalised banks have started the practice of advance credit planning for certain preferred sectors. The programme is highly commendable, but it fails in its purpose as the differences between targets and actual performance are indeed huge as would appear from the following table:

(Rs. in million)

	1972-73		1973-74		1974-75	
	Target	Actual	Target	Actual	Target	Actual
Agriculture	80.00	56.8	250.0	99.5		
Housing	90.00	73.9	50.0	112.7		
Business and Industry	266.00	418.7	450.0	73.5		
Total Small Loans	436.0	549.4	750.0	285.7		
Loans for purchase of tractors etc.	20.0	12.5	50.0	20.2		
GRAND TOTAL	456.0	561.9	800.0	305.9		

*Source: Economic Survey of Pakistan 1974-75.*

Nationalised banks have made some progress during 1974 with the number of branches increasing from 3,397 in January 1974, to 4,441 in December, 1974. In this period the staff has increased from 44,959 to 51,919 and credit advanced increased from Rs. 17,418.9 million to Rs. 18,487.6 million. The relations between management and labour are not very satisfactory and the country had to endure a fairly inconvenient strike by bank employees following the announcement of the recommendations of the Banking Wages Commission which had sought to provide some uniformity in the wages and ancillary facilities offered by different banks. The standard of service in the banks leaves a lot to be desired and the clerical staff do not take their managers seriously enough. The Banking Council will have to do something to restore the same kind of vigour and zeal in commercial banking which characterised their growth from 1949 to 1973. The banking dynamism of Pakistani commercial banks needs to be tempered by banking conservatism.

### Pakistan Industrial Credit and Investment Corporation

The Pakistan Industrial Credit and Investment Corporation (PICIC) is a specialised credit institution which was established in October 1957 with its head office at Karachi to provide finance to the private industrial sector in the form of long or medium term loans in local or foreign currencies or share participation or purchase of debentures and the underwriting of any public issue of shares and debentures. It guarantees and counter-guarantees loans and obligations, arranges participation of local and external finance from private and institutional investors, facilitates creation, issue or conversion of capital in any form, and acts as a trustee in this regard. Besides, it helps in the promotion of industries by providing managerial and technical advice to the industrialists. PICIC also aims at broadening the base of industrial ownership in the country and encouraging the growth of the stock market.

The total resources of the Corporation (excluding those utilized in the former East Pakistan) as of March 31, 1974, were as follows:—

(Rs. in million)

Paid-up Capital	60.00
Reserves	129.60
Long-term Loans from Government of Pakistan	82.40
Long-term Loans from US(AID)	30.00
Rupee Debentures.	185.00

Long-term Rupee Lines of Credit from the State Bank of Pakistan	125.00
Lines of Credit in Foreign Currencies	4874.60
Total:	5486.60

\*Subordinated to other long-term debts and to paid-up capital.

The total capital resources by the end of March 1974 amounted to Rs. 5486.60 million as against Rs. 5100.8 million in the corresponding period last year.

PICIC activities are guided and governed by a Board of Directors, consisting of 21 members: the Chairman, the Managing Director, 12 directors representing Pakistani shareholders, two representing the Government of Pakistan and the Provincial Governments and five foreign shareholders (including one representing IFC). The Managing Director is the Corporation's Chief Executive and is appointed by the Board. The Board usually meets four times a year to consider broad policy matters and takes decisions on investment applications of Rs. 5 million and more. The Board has delegated some of its powers to a standing committee called the Executive Committee, consisting of seven directors, including the Managing Director. This committee considers investment proposals upto Rs. 5 million.

PICIC is supposed to finance industries which are technically economically and financially viable. To establish such viability PICIC not only look into commercial profitability, but also into the contribution which the enterprise would make in economic terms. It, therefore, insists on careful appraisal of projects. The Corporation prefers to finance industries which are based on local raw materials and are either export-oriented or would result in import savings. PICIC policy is to diversify its investments both by region and by industry. PICIC's financing is done in alignment with the national development plans. Industries that can be financed by PICIC have, therefore, to be covered by the Industrial Investment Schedules, which are issued from time to time by the Government and which indicate the industries which, in the Government's view, deserve priority in promotion. While PICIC confines its financing to industries included in the Industrial Investment Schedules, it does not follow that PICIC would, without further investigation, be willing to finance all industries included in the Schedule. Such industries have to pass the test of viability and PICIC has to be satisfied that their sponsorship is sound and that they satisfy the other criteria mentioned above.

The Corporation's interest rates on foreign currency loans have been fixed by the Government and vary from 8-1/2 to 9-1/2 per cent per annum. The rate on rupee loans varies from 9-1/2 to 12-1/2 per cent per annum. The Corporation charges a technical assistance fee equal to 1/2 per cent of the loan sanctioned, which is payable at the time of signing the loan agreement. It also levies a commitment charge of 1-1/2 per cent per annum, payable quarterly, on the undebursed balance of the loan. PICIC's loans are given periods ranging from 5 to 15 years. The Corporation does not assume any major part of the financial risk involved in any enterprise but expects the sponsors to make and arrange for a reasonable part of the required finance, principally in the form of equity. In case of financial assistance in the form of loans, guarantees and purchase of debentures, in foreign currency and in local currency. PICIC obtains the option or convert 20% of the amount of assistance into shares of the company at par value in the case of new enterprises and at a premium (which is negotiated with the borrower, keeping in view general regulations framed from time to time by the Government) in the case of established companies. The Corporation also does not assume any management responsibility in the projects financed by it. In the case of projects where the amount of financing is large, PICIC has the right to appoint two directors on the board of the company.

There is no doubt that PICIC has performed a commendable role in the industrial development of Pakistan and its processing of applications has been a matter of fact and expeditious. It has sometimes been handicapped by a shortage of foreign exchange resources, and above all, by the availability of rupee financing. The charge of PICIC having contributed to the concentration of wealth and economic power is probably a valid one. But a more serious shortcoming in PICIC's operations has been its concentration on three sectors, namely, food products and pro-

cessing, paper, paper products and printing, and textiles. These sectors account for over 75 per cent of the loans advanced by PICIC as on March 31, 1974, much to the neglect of groups like agriculture and forest products, leather and rubber products, engineering, minerals, chemicals, cement, clay and glass and tourism.

## **Industrial Development Bank of Pakistan**

The Industrial Development Bank of Pakistan (IDBP) was established in August, 1961, under the Industrial Development Bank of Pakistan Ordinance of 1961, as a successor to the Pakistan Industrial Finance Corporation. The institution is designed to provide medium and long term finance to small and medium-scale enterprises and specially to bring into the industrial field a large number of new entrants from among the medium and small entrepreneurs. It provides loans both in local and foreign currencies.

The paid-up capital of the Bank is Rs. 50 million. 51 per cent was held by the Government of Pakistan, and the remainder held by insurance companies, banks and private individuals. Consequent upon the nationalisation of banks, the entire share capital previously held by private individuals and other institutions stands transferred to the Federal Government. Over the years the Bank has built up a sizeable resource base. IDBP acquires its rupees resources largely from its paid-up capital, reserves, debentures, loans from the Federal Government, credit lines from the State Bank of Pakistan, and deposits. The availability of rupee resources has severely restrained the ability of the I.D.B.P. to broad-base industrial ownership. The foreign exchange resources are obtained from the I.D.A., A.D.B. and other foreign credits allotted to it by Government. The I.D.B.P. in the sixties did a commendable job in infusing new blood into industrial ownership and spreading industrial growth into the relatively more under-developed areas of what was then Pakistan. Its first Managing Director, Mr. M. Raschid, served the institution well with the support which he was then able to secure from the Ministry of Industries.

As of 30th June, 1975. I.D.B.P. had sanctioned loans totalling 3108 million rupees to 4801 of its clients (the figures include East Pakistan). Its lending limit is 4 million rupees except in those cases which are referred to it by Government. The management of the I.D. B.P. has improved and one does not experience much of the delays which characterised earlier sanctions. It has also developed a sound and professional management. The balance-sheet of I.D.B.P. is quite satisfactory since the break-up of its 100-rupee share was 236.13 rupees at the beginning of 1974.

## **National Investment Trust**

The National Investment (Unit) Trust (NIT) was set up in 1962 by an agreement between the National Investment Trust Limited, as a Management Company and the National Bank of Pakistan, called the Trustee. The Trust was established to mobilise savings to meet the growing needs of the corporate sector and to achieve broad-based corporate ownership. The Trust started operation from 1st January, 1963. The National Investment Trust is a joint stock company with a paid-up capital of Rs. 0.12 million, subscribed equally by 12 shareholders, viz, the Federal Government, four leading banks, three financial institutions, the Pakistan Insurance Corporation and three leading industrialists. The board of directors of the company consists of 12 representatives of the above share-holders, besides the Managing Director who is the chief executive of the company and is appointed with the approval of the Government.

In mid-1975 the sale and repurchase price of NIT units was fixed at 10.90 and 10.50 rupees respectively, and the minimum dividend of 1.10 rupees per unit and repurchase price were guaranteed by Government. The yield works out to 10.2 per cent per annum. NIT is supporting the stock exchange to a certain limited extent. Its units are quite popular with those who wish to avail of the investment allowance of 30 per cent (subject to a maximum of 30,000 rupees) for income-tax relief. During 1974-75, the unfortunate recent trend of repurchase of units exceeding sales was reversed. As of mid-1975 the market value of NIT's total investment funds was 25 to 30 per cent less than their cost value. It is Governmental guarantee which still helps NIT in business.

## Investment Corporation of Pakistan

The Investment Corporation of Pakistan (ICP) was set up in February, 1966, to encourage and broaden the base of equity investment and to develop the capital market in the country by providing institutional facilities for promoting share-mindedness among the general public and with a view to developing the capital market and broadening the base of equity investments, the Corporation performs the following major functions:

- i) It underwrites new issues of securities and debentures to enable sponsors to meet the equity and debts requirements in the financing of their projects.
- ii) It opens and maintains Investor's Accounts to promote share-mindedness and thus widens the base of the capital market for buying and selling stocks and bonds of public limited companies:
- iii) It floats closed-end mutual funds which serve as the medium for selling the seasoned securities from its portfolio of stocks acquired as a result of its underwriting take-ups and support operations on the stock market; and
- iv) It buys and sells shares on the stock market to impart stability to the share values—purchasing shares when the market conditions are bearish and selling shares when it is bullish.

The Corporation has a share capital of Rs. 50 million of which 70 per cent is held by 10 "scheduled" banks (including 3 foreign banks), the remaining 30 per cent by the State Life Insurance Corporation and Pakistan Insurance Corporation. Besides its share capital, the Corporation has received long-term loans from the Federal Government amounting to Rs. 318.5 million until June 30, 1973. The mutual funds of the ICP lessened during 1973 and 1974 but they have picked up in mid-1975 largely due to institutional support as would appear from the following table:

	Ist M.F.	2nd M.F.	3rd M.F.	4th M.F.	5th M.F.	6th M.F.
i) Par value	100	100	100	100	10	10
ii) Net assets per certificate on March 30, 1974	72.18	105.39	88.4	64.45	9.2	9.13
iii) Market value per certificate on March 30, 1974	60	49.50	59	64.5	9.5	8.55
iv) Market value per certificate on July 25, 1975	110	104	104.50	101.20	10.52	10.05

## National Development Finance Corporation

The National Development Finance Corporation (NDFC) was established by the Federal Government in January, 1973. The Corporation started operation in July the same year. The National Development Finance Corporation is governed by a Board of 6 Directors, including its Chairman who functions as the Chief Executive. All the Directors are appointed by the Government. The paid-up capital of the Corporation is Rs. 80 million owned by the Government in full. The Corporation has a line of credit of Rs. 500 million from State Bank as loan to cover working capital needs.

The Corporation has been assigned the responsibility of providing long and medium term loans, working capital finance and other types of financial assistance and advice to enterprises in the public sector. The Corporation is authorised to extend financial assistance to "eligible enterprises" which include:

- (a) undertaking taken over or managed by the Federal Government under the Economic Reforms Order, 1972;

(b) undertakings which are wholly or partly owned by the Federal Government; and

(c) any other undertaking declared by the Federal Government to be an eligible enterprise. The Corporation also acts as financial consultant and investment banker to the government owned and controlled enterprises for the purpose of developing projects/plans and it makes arrangements for the formation of banks and financial institution consortia, both at home and abroad, for raising the required funds. During its nine months of operation (upto March 1974) the Corporation extended financial assistance to the eligible enterprises of national importance to the extent of Rs. 152 million including foreign currency loan amounting to Rs. 570 million.

The efforts of NDFC are focussed on the mobilization of private savings and in directing them into investment in industrial enterprises in the public sector. It has introduced three types of deposits viz: (i) Standard Deposits, (ii) Regular Income Deposits and (iii) Golden Certificate Deposits. The balances of all the three deposits amounted to Rs. 61.9 million as on March 31, 1974.

The Corporation has introduced a new scheme of providing suppliers' credit. The credit is advanced to eligible enterprises to finance the sale of investment goods produced by these enterprises. This is expected to enhance the production of investment goods in Pakistan and release the scarce foreign exchange for other important uses.

The NDFC has been active in advancing loans to public sector industries and it has done business worth about 250 million rupees in the past two years ending mid-1975. It is too early to judge the efficiency of this organisation. The experience of the commercial banks with the nationalised industries has not been an entirely happy. If the NDFC can play the role of a responsible yet sympathetic banker to state managed industry it will have rendered a unique service to the economy. If, however, it takes the line of least resistance in dealing with the industrial concerns of the public sector it can well become the engine which helps to keep afloat inefficient and uneconomic undertakings.

## **State Life Insurance Corporation**

The management of Life Insurance business in the country was taken over by the Government on March 18, 1972. After an interest period, during which the Life Insurance Management Board served as the life policy-making and supervisory body, the business was nationalised and the State Life Insurance Corporation of Pakistan (SLIC) was set up, which started operation with effect from November 1, 1972.

The principal objectives of nationalisation were as follows:

- i) To run the life insurance business on sound and economic lines;
- ii) To provide a more efficient service to policy holders;
- iii) To maximise the return to policy holders by economising on expenses and increasing the yield on investments;
- iv) To make life insurance a more effective means of mobilising national savings;
- v) To widen the area of operation of life insurance and make it available to as large a section of the population as possible.

Since nationalization, premium rates have been reduced and standardised, field structure, salary scales and service conditions have been rationalised, a training programme introduced and a continuous review of investment policy has been undertaken to maximise returns.

During the second year of its establishment, the State Life Insurance Corporation made an effort to fulfil the objectives of nationalization by running the life business on sound lines, earning a higher yield on the life fund investments extending the life insurance coverage to rural areas and serving as an effective medium for the mobilization of national savings.

Notwithstanding the fact that inflationary conditions in the economy in 1974 exercised a dampening effect on the mobilization of fresh household savings and caused impediments in the promotion of life insurance, the Corporation achieved a satisfactory rate of growth in its business

operations. New sums assured in respect of ordinary life business registered an increase of 11.9 per cent from Rs. 882.5 million in 1973 to Rs. 987.6 million in 1974.

The investment of the life fund of the policy-holders have been managed with the main objective of maximisation of return consistent with security of investment. According to provisional figures, the total life fund investment portfolio increased by Rs. 175.4 million, from Rs. 1400.8 million on December 31, 1973, to Rs. 1576.2 million on December 31, 1974. As on December 31, 1974, Federal and Provincial Governments' securities accounted for 30.6 per cent of the total life fund investment portfolio, shares and debentures 29.3 per cent; loans to policy-holders, 15.6 per cent; bank deposits 15.3 per cent, real estate 7.7 per cent; and loans against mortgage of immovable properties 1.5 per cent. The average yield on the life fund investment in overall return was made possible by switching over from low-yielding securities to other financial assets carrying a comparatively higher return, a higher rate of marginal yield on fresh investments and rigorous management of cash balances in a manner that surplus funds become productive at the end of each business day.

The satisfactory functioning of the SLIC must gladden the souls of people like the late Mr. K.F. Haider who pioneered life insurance in Pakistan.

## Pakistan Insurance Corporation

The Pakistan Insurance Corporation (PIC) was established by the Government in 1953 to provide reinsurance protection and other facilities necessary for the promotion and development of a national insurance industry. In 1967, the Act was amended to expand the activities of the Corporation in the light of experience gained in the past 14 years.

The Corporation provides: (a) reinsurance facilities within Pakistan and overseas; (b) assists in development of insurance companies; (c) undertakes such direct insurance business as is authorised by the Government; (d) manages the National Co-insurance Scheme (now, National Insurance Fund) Export Credit Guarantee Scheme; (e) enemy insurance companies, war risk insurance and civil commotion; (f) administers insurance programmes on behalf of Government; and (g) promotes projects of regional cooperation in the field of insurance.

The general direction and administration of the business of the Corporation is vested in a board of directors which consists of (a) five nominated directors, at least two of whom are to be Government officials connected with the Ministries of Commerce and Finance, (b) three elected directors from amongst the share holders other than the Federal Government and (c) a Managing Director, appointed by the Government. The Corporation has an authorised capital of Rs. 10 million. The investments held by the Corporation in Pakistan as on December 31, 1973 amounted to Rs. 36.9 million compared to Rs. 36.0 million in the last year as follows:

	(In million Rs.)	
	1973	1972
1. Government Loans, Bonds and Securities	7.383	6.484
2. Stocks and Shares	24.675	24.675
3. Debentures	3.065	3.065
4. Land and Buildings	1.762	1.762
	36.885	35.986

The late Mr. Zaheeruddin Ahmad did a most commendable job in extending the operations of this Corporation particularly with the RCD Countries. The RCD re-insurance polls and their continued growth are indicative of their sound base.

## Agricultural Development Bank of Pakistan (ADBP)

The Agricultural Development Bank of Pakistan (ADBP) was established in 1961 on the recommendations of the Credit Enquiry Committee through the merger of the then Agricultural



Development Finance Corporation (ADFC) and the Agricultural Bank of Pakistan (ABP).

The Bank provides credit to individuals as well as corporate bodies engaged in agriculture or development of agriculture, which, according to the Bank's charter, includes besides the raising of crops, horticulture, fisheries, forestry, animal husbandry, poultry farming, dairy farming, bee-keeping and sericulture. Credit facilities are also provided by the Bank to cottage industries in the rural areas. In order to meet the various types of credit requirements the Bank is authorised to advance short, medium and long term loans. The charter of the Bank laid special stress on the provision of credit to small and medium farm-holders.

The Bank enjoys a measure of autonomy in its management. The general direction and supervision of the Bank is entrusted to a Board of Directors, headed by a Chairman, who is also the chief executive of the Bank. The Chairman and the members of the Board are appointed by the Government.

At present the Board of Directors consists of a Chairman and two senior officers of the Federal Government, four officers of the Provincial Governments and one non-official nominated by each Province.

There is also an Executive Committee, consisting of the Chairman and three directors, competent to transact business on behalf of the Board.

The financial position of the Bank as on March 31, 1974, is given below:

	(Rupees in Million)	
	March 1974	March 1973
1. Paid-up capital	1.87	1.82
2. Reserves	0.11	0.11
3. Debentures	0.05	0.05
4. Deposits (excluding P.F./guarantee Fund etc.)	1.06	0.81
5. Line of Credit from IDA/SIDA/ADB.	3.29	3.06
6. Borrowings from State Bank of Pakistan	5.54	3.84
7. Borrowings from Government	0.03	0.03
Total:	11.95	9.72

The borrowing from the State Bank of Pakistan is said to be 740 million rupees in mid-1975.

In order to meet the various types of credit requirements arising from different gestation periods of agricultural projects, the Bank advances loans for short, medium and long terms. The short-term loans are given for financing the cost of the production and marketing of agricultural products, and, therefore, covers items like seeds, fertilizers, labour charges, hire of bullock carts and small agricultural implements etc., beside those for enabling the farmer to hold on to his produce till a fair price is available.

Medium-term loans are given for periods exceeding 18 months and upto five years. They are usually granted for purchase of agricultural implements, means of transport and light machinery, cattle and sheep breeding, dairy farming, poultry farming and reclamation of land.

Long-term loans are given for periods exceeding five years for development purposes such as construction of warehouses, cold storage, purchase of tractors and other heavy machinery, agro-industries, installation of tubewells and planting of orchards, etc.

The Bank has raised the rate of interest from 7% on short-term loans to 9% on loans upto Rs. 5,000, and from 8% on medium and long-term loans to 10% loans exceeding Rs. 5,000, from January 1974. The rise in the rate of interest became unavoidable because of a 2% increase in the lending rate of interest by the State Bank of Pakistan.

The Bank effected a number of changes in the lending procedures during 1973-74 with a view to facilitating the small farmers utilization of the Bank's loans. The changes are as follows:

- 1) The interest-subsidised loans previously allowed to the agriculturists of the flood-affected areas for seeds, fertilizers, tractors' hire, farm implements, and bullocks have now been extended for the repair of tubewells as well.
- 2) The ceiling of valuation of barani lands, in the Azad Kashmir area has been increased from Rs. 1,000 per acre to Rs. 2,000 per acre. The barani lands under the Chinar and Deodar forests have also been allowed to be evaluated at Rs. 3,000 per acre.
- 3) The checking of proper utilization of loans has been made compulsory in cent per cent of cases after one month of the disbursement of loans.
- 4) The recovery of loans of all types for repair of tractors has been fixed at four years and that of tubewells at three years.

The A.D.B.P. needs to be operated with greater understanding and financial discipline. Recoveries at the end of March 1974 amounted to 77 per cent of the amount due, which is not a satisfactory figure. Banks which have to write-off 23 per cent of their advances can be in serious trouble unless helped out by the Central Bank, as seems to be the case with the ADBP. It is disturbing to find the ADBP venture into such things as the establishment of administrative Staff Colleges, when the basic needs of agriculture are still to be fully met even in mid-1975. The ADBP would do well to draw up its priorities with great care and deliberation and to concentrate its activities on financing the real requirements of farmers for agricultural inputs. Above all ADBP loans should not be treated as patronage or as a gift extended to the needy. As a specialised financial institution for agricultural credit, the ADBP has above all the responsibility of inculcating responsible business habits into the rural population. The ADBP should not also become an employment agency; its administrative and field expenses should in no case exceed 5 to 6 per cent of its annual turnover of advances.

## **House Building Finance Corporation (HBFC)**

The House Building Finance Corporation (HBFC) was established in 1952 as a statutory body to provide credit facilities for the construction of houses in all towns and cities of Pakistan. Activity of the Corporation was at first confined to Karachi where its Head Office was located but it subsequently extended its activity to all other urban areas where regional and sub-regional offices were established.

In order to attempt to provide shelter for every Pakistani family the People's Party Government increased the allocation of housing in the Annual Development Programme and approved various schemes to improve and extend the loan facilities of the House Building Finance Corporation. During the last two years of its operation, the Corporation has taken steps to relax and streamline loan procedures to reach people needing houses and housing finance in the remotest corners of the country.

The authorised and paid-up capital of the Corporation is Rs. 50 million fully subscribed by the Federal Government. The Corporation pays 2% interest to the Government on the share capital. The House Building Finance Corporation supplements this rather limited capital base by recurring loans from the State Bank of Pakistan and Government.

The commercial banks also advance loans for housing and they advanced some 150 million rupees during 1974-75. In view of the increase in the cost of construction, the loan limit for small loans for housing has been raised from Rs. 50,000 to 75,000 in the case of individuals. Construction companies engaged in low-cost housing can borrow any amount provided that the cost of individual dwellings constructed by them does not exceed Rs. 75,000. This compares with the previous limit of Rs. 50,000.

The House Building Finance Corporation has been truly a small people's credit institution and its management under Managing Director M. Aslam has been effective and sympathetic. It has increased its operations by leaps and bounds. The amounts of loans sanctioned by the

Corporation has been stepped-up. The amount of loans sanctioned (gross) compares as under:—

	Number	Amount in million Rs.
1971-72	1177	19.2
1972-73	2314	50.8
1973-74	5441	141.7
	46985	99.5 (Flood)
1974-75	10054	289.2

The Corporation has placed special emphasis on smaller loans to the poorer classes. Figures for the period. 1.1.1972 to 30.9.1975 are indicative of the efforts of the corporation in this regard and small loans up to Rs. 20,000/- exceeded 63 % of the total number of loans sanctioned. This percentage is more significant considering the rising construction costs when an increasing number of borrowers are requiring loans exceeding Rs. 20,000/-. If the loans given to the flood victims are taken into account, then the percentage of loans below Rs. 20,000/- will increase to 90%.

Recovery of loans is also being given due attention and is satisfactory. The Act was amended, procedures rationalised and more powers acquired to effectively pursue the recovery work. In view of the phenomenal increase in the cost of housing, there is a strong case for increasing its lending limit from 40,000 Rupees to at least 100,000 rupees and for permitting it to finance the purchase of any housing property after duly verifying its market value.

### Peoples' Finance Corporation

The People's Finance Corporation (PFC) was incorporated in 1972. The objective of the Corporation was to encourage the setting up of small businesses in order to improve the lot of persons of modest means, reduce unemployment, particularly among the educated unemployed, and also add production capacity to the national economy. The objective was to be achieved by harnessing the technical know-how and skill of those who have the necessary talent but insufficient financial means to utilize it for personal as well as the social good.

**Capital structure:** The authorised share capital of the Corporation is Rs. 100 million and the paid-up capital Rs. 0.5 million. The respective shares in the capital are as follows: Federal Government Rs. 0.3 million, State Bank of Pakistan 0.05 million, National Bank of Pakistan Rs. 0.04 million, United Bank Limited Rs. 0.04 million, Habib Bank Limited Rs. 0.04 million and Muslim Commercial Bank Limited Rs. 0.03 million.

The People's Finance Corporation is popularly called the Rickshawalla Corporation. Its clientele includes taxi drivers, wagon and truck operators, small industries, professions and small time traders. Its ratio of sanctions to disbursements could be substantially improved. If this Corporation could create a large class of small entrepreneurs, it would give the mixed economy a new and powerful boost but it needs to be run on a broader and much larger basis than at present. One reassuring feature of the corporation is its reasonable profitability, considering the nature of its business.

### Equity Participation Fund

The Equity Participation Fund was set up in 1970 to foster and accelerate the growth of small and medium-sized industry in the private sector in the then East Pakistan as well as in the less developed areas of West Pakistan. In West Pakistan, the Fund concentrated its activities in the N.W.F.P. and Baluchistan, Khairpur and Bahawalpur Divisions and the Districts of D.I. Khan, Muzaffargarh, Mianwali, Dadu, Thatta, Tharparkar. Jhelum and areas of the districts of Sargodha and Jhang. The I.D.B.P. are the administrators of the Fund and nominate the Chief Executive.

With the secession of East Pakistan, the Fund was reactivated at the end of 1972 and it commenced operating from January 1973 with its Head Office at Karachi.

The overall direction and superintendence of the affairs and business of the Fund rest in a Board of Directors consisting of 10 members of which two are nominated by the Federal Government, one each by the Provincial Governments and one each by the State Bank of Pakistan and IDBP. Two directors are elected by the institutional investors.

The authorised share capital of the Fund is Rs. 2.0 million. The present paid-up capital of Rs. 0.5 million is contributed by the Federal Government (Rs. 0.2 million), State Bank (Rs. 0.1 million), Provincial Governments (Rs. 0.1 million) and institutional investors (Rs. 0.1 million).

The Fund augments its resources by raising funds through issue of debentures and / or by raising loans from the Federal Government. The Federal Government has allowed a special facility in the form of tax credit for companies who purchase its shares or debentures.

The Fund lost control and possession of assets worth Rs. 0.51 million with the secession of East Pakistan in December, 1971. The assets in West Pakistan at that time stood only at Rs. 0.20 millions.

The Fund, with the permission of the Federal Government raised interest free debentures of Rs. 20.0 million. Funds raised through these debentures comprise the entire resources of the Fund at present.

The Fund is guided by two major considerations in its investment operations in the equity capital of small and medium-sized enterprises:—

- (a) to encourage entrepreneurs of small and medium means who are handicapped in raising resources from the capital market for their enterprises;
- (b) to provide equity support to strengthen the basis of diversified portfolio and enhance their risk-bearing ability and, at the same time, increase the creditworthiness of these enterprises.

The Fund provides equity support both in the form of direct purchase of shares and in the underwriting of the public issue of shares. It also provides finance facilities to projects set up in less-developed areas.

In order to be eligible for assistance from the Fund the enterprise must, first, be located in the "less-developed" area, secondly, its paid-up capital should not exceed Rs. 0.25 million except for textile mills, where the maximum spindle capacity of 12,500 has been prescribed, and, thirdly, the interest of the directors of the company in other concerns should not exceed Rs. 0.15 millions.

The equity support by the Fund is confined to a minority interest in the total equity of the enterprise and not more than Rs. 0.10 million can be invested in any single enterprise.

The Equity Participation Fund has yet to establish its efficiency in Pakistan. It was made operative at a time when the investment climate for the private sector, which the Fund is supposed to help, was rather unfavourable. However, there can hardly be any two opinions on the necessity of such an organisation for assisting and encouraging the private sector to move into the poorer areas of the country. The Equity Participation Fund should be careful, though, in assessing the feasibility and the profitability of the projects offered to it for participation.

Before concluding the section on national financial and credit institutions it is necessary to generally assess whether they operate on sound business and financial principles, or whether the extent of political patronage, nepotism, and corruption has reached a level dangerous enough to subvert the very objectives for which they were established. It can be said with a measure of confidence that the management teams of Pakistani banking and credit institution are as honest as in most other countries which do not have centrally planned economies. Corruption at the clerical and lower echelon of the supervisory level is, however, not uncommon. The field staff of institutions like the Agricultural Development Bank of Pakistan and that of the commercial banks more often than not succumb to human greed. But till mid-1975 there was no question of the prevalence of widespread corrupt practices even amongst the field staff. Political and official pressures are another matter, and Pakistan shares this necessary concomitant of a democratically elected government with every other country practising a mixed economy. These pressures on behalf of deserving cases do not inflict any substantial damage to the economy. It does not really matter if A gets a sanction instead of B or C, if all three enjoy near equal efficiency. What is pertinent is that the subject-matter of the sanction should be within the priority limits established for that sector, and that the sanction is not accorded to a party totally incompetent to pursue that

project. The sale of sanctions overcapitalises a project and this in turn leads to several abuses including over-invoicing the cost of plant and equipment obtained on a loan basis or the under-invoicing of export. Political patronage is acceptable only upto a certain limit and should by no means encompass more than a small part of a particular sector, otherwise efficiency of business and production will suffer and productivity will be reduced. It is also important that in matters such as the allocation of tractors, transport, vehicles and digging of tube-wells, a major part of the total availability should be apportioned on some equitable basis, such as 'first come, first served.' If the allocation of such items which are in short supply is done entirely at the whim of the government in power or for political considerations and without reference to need or some other equitable system, a class of frustrated and volatile "have-nots" will be created that would add to the social upheaval. We must ensure that the nightmare of some financial institutions in Yahya Khan's days, which became the playgrounds of undesirable elements of society is never repeated.

## International Monetary and Financial Institutions

The family of international financial and monetary institutions have served the world well during the past 25 years. They have also endeavoured to provide financial and technical assistance to the under-developed world within the limitations of the resources they could mobilise from the developed world. The availability of sound and well worked out projects in developing countries, their ability to serve their external debt and paucity of resources have been the main hurdles in the way of these international institutions in further accelerating their developmental aid. Those who have attended the United Nations Economic and Social Council and Colombo Plan sessions since the early fifties would appreciate the magnitude of the efforts which had to be made to arouse the social conscience of the industrialised world towards the predicament of the developing countries which were caught in the vicious cycle of low incomes, low savings and low investment.

The urgency of accelerated capital formation and development of technical expertise was stressed in season and out of season, and it was fortunate that our appeals did not fall on deaf ears. It is due to the tireless effort of people like Eugene Black, George Woods and Robert MacNamara (Presidents of the World Bank since the fifties) that the receiving and giving of aid was institutionalised on a rational and priority basis. These gentlemen approached the problems of aid and development from an overall and imaginative perspective and did not allow their immediate national considerations to get the better of their realistic global approach. People like the late Mr. Said Hasan in Pakistan, Sir Chintaman Deshmukh and Mr. C.V. Narasimhan in India, Lord Casey of Australia, Lester Pearson and Nik Cavell of Canada, the late Sir David Owen, the late Sir Alexander Symon and Sir William Iliff of the U.K., the late Ralph Wills, David Bell and the late Dr. Randall Klemme of the U.S.A., and Mr. Coomaraswamy of Sri Lanka should also be remembered for their enthusiastic zeal in correlating and coordinating Economic Aid and Economic Development. The author worked in close collaboration with these gentlemen during the 1950s; and it was, to say the least, an educative and thrilling experience. Institutional assistance, as against bilateral assistance, has the advantage of objectivity and possibly the absence of a direct *quid pro quo* between the donor and the recipient. In the initial years Pakistan preferred the bilateral approach, and it was only after the formation of the Aid to India Consortium that we too opted out for the Consortium approach. The World Bank was instrumental in securing this change of attitude in the 1960s and since then we have not regretted the formation of a Consortium under the aegis of the World Bank to take stock of our annual aid requirements and arrange the necessary funds. The International Finance Corporation and the International Development Association are affiliates of the World Bank and are the offshoots of long-drawn-out discussions and deliberations in the U.N. Economic and Social Council. The Asian Development Bank is of more recent origin, but it has been quite active in providing much needed development loans. The Export-Import Banks of the U.S.A., Japan, West Germany, etc., have also extended credits on commercial terms in substantial amounts.

The newly-established Islamic Bank is the most recent in the chain of international financial institutions; it is indicative and symbolic of the fact that Islam continues to inspire people even in the last quarter of the 20th Century and that the richer Muslim States are conscious

of the legitimate requirements of those Muslim States still shackled to poverty on account of paucity of capital formation. Last, but by no means the least, is the International Monetary Fund which has endeavoured to maintain international exchange rates on an orderly basis and to provide assistance for overcoming short-term balance of payments difficulties. In the following paragraphs are discussed in more detail the nature and functions of these international organisations and their relationship with Pakistan. It must be emphasised at the very outset that Pakistan and these institutions have invariably enjoyed a warm and cosy relationship with the result that our requests have always received sympathetic consideration.

## International Monetary Fund (IMF)

The Articles of Agreement of the International Monetary Fund (IMF) and those of the International Bank for Reconstruction and Development (IBRD or World Bank) were formulated at the United Nations Monetary and Financial Conference, held at Bretton Woods, New Hampshire, July 1—22, 1944. Membership in the Fund is a prerequisite to membership of the Bank. An independent international organization, the Fund has entered into an agreement with the United Nations which define their cooperation in matters of mutual interest.

The Fund Agreement has been in force since December 27, 1945, when it was signed by 29 governments, representing 80 per cent of the original quotas in the Fund. Following on the decision to establish Special Drawing Rights the Fund Agreement was amended with effect from July 28, 1969 to incorporate this and other matters.

Each member of the Fund is assigned a quota which determines the amount of foreign exchange that it may draw from the Fund and the voting power of the member. The subscription of each member is equal to its quota, and is payable partly in gold and partly in the member's own currency. On December 31, 1970 the Fund's assets included \$4,935 million in gold, \$218 million in subscriptions receivable and \$24,486 million in various national currencies. The highest authority of the Fund is the Board of Governors, on which each member country is represented by a Governor and an Alternate Governor. Normally, the Board of Governors meets once a year. The Governors may take votes by mail or other means between annual meetings. The Board of Governors has delegated many of its powers to the Executive Directors in Washington. However, the conditions governing the admission of new members, adjustments of quotas, election of Directors and certain other important powers remain the sole responsibility of the Board of Governors. There are 20 Executive Directors. Five are appointed by the five members with the largest quotas in the Fund. The five appointed Executive Directors represent the United States, United Kingdom, West Germany and France.

The main objective of the International Monetary Fund is to promote a freer system of world trade and payments as a means of helping its 117 members to achieve economic growth, high levels of employment, and improved standards of living.

The \$39 billion which the Fund holds in gold, Special Drawing Rights (SDRs), and currencies provides a reserve on which members may draw, with its agreement, to meet foreign obligations during periods of temporary difficulty in their international balance of payments. The use of Fund resources is linked with a member's efforts to reduce exchange and trade restrictions, and to establish currency convertibility. The advent of SDRs enables the Fund to supplement the reserve assets of members that become participants in its Special Drawing Account.

The Fund constitutes a continuing forum for the consideration of foreign exchange and payments problems in which members are encouraged to avoid the use of restrictive practices and to maintain an orderly pattern of exchange rates. A request for Fund assistance is considered in the light of the member's fiscal and monetary policies, and its cooperation with the Fund's principles.

Each member undertakes to establish and maintain an agreed par value for its currency, and to consult the Fund on any changes, which may be cumulative, in excess of 10 per cent of the initial parity. Countries retaining exchange controls are required to hold annual consultations with the Fund regarding the restrictions in use, the balance of payments justification for them,

and possibilities for their removal. To assist the Fund in its deliberations, members supply information on their holdings of gold and foreign currencies, international trade, investments and payments, national income and prices, and other relevant matters.

The Fund's financial assistance takes the form of a foreign exchange transaction. The member pays to the Fund an amount of its own money equivalent, at the par value agreed with the Fund, to the amount of foreign currency it wishes to purchase. The member is expected to "repurchase" its own currency from the Fund within three, or at the outside five years, with a payment of gold or convertible currency acceptable to the Fund. These arrangements are subject to certain charges which rise in relation to the amount of foreign exchange involved, and the length of time it remains outstanding.

Currencies drawn from the Fund may be used in a flexible way to relieve the member's temporary payments difficulties and its assets are not intended for any other use. Members may not, therefore, draw on the Fund's resources to finance development project or for military purposes. Many developing countries use the Fund's short-term assistance to help establish payments conditions conducive to their long-term growth.

For a member in foreign payments difficulty, the Fund may be the quickest available source of additional reserves, since its Directors are prepared to act upon an emergency request within 72 hours. More often members obtain an assurance from the Fund of assistance in a fixed amount for periods usually up to one year in advance through the Fund's facility of stand-by arrangements. Through stand-by arrangements, the Fund plays a part in members' longer-range programmes of fiscal and monetary reform. A stand-by arrangement with the Fund often facilitates a member's negotiations for additional credit with international institutions, lending agencies of foreign governments or with private banks.

The provision of technical assistance constitutes one of the Fund's important activities. Fund officials are sent to member countries, sometimes for extended periods of time, to give advice in connection with stabilization programmes, or on such matters as the simplification of exchange systems, the modification of central banking machinery, the reform of fiscal systems and budgetary controls, and the preparation of financial statistics. The Fund itself collates and publishes a considerable volume of statistics supplied by members. As part of its technical co-operation, the Fund established the IMF Institute in May, 1964, to coordinate and expand the training programme that it maintains for the staff of finance ministries and central banks of members.

Three reviews of the adequacy of members' quotas, carried out by the Executive Directors, have led to general and selective increases. The first, in 1958, brought a \$5.5 billion rise in total quotas. A review, conducted early in 1965, was followed by a \$5 billion increase. Following another general review of quotas, the total of members' quotas stood at \$28.4 billion on December 31, 1970.

The Fund is also authorized under its Articles of Agreement to supplement its resources by borrowing which it undertook in 1975 to provide "oil facility" to those countries most affected by the increase in oil prices.

Comparatively little use was made of the Fund's resources in the first years of its existence, when progress toward its objectives was limited by the severity of post-war economic difficulties, and exchange restrictions and other import controls were widely used. The international payments situation, which was characterized by a large, continuing surplus earned by the United States in its trade with other countries, suggested a greater need for grants and long-term credits than for the short-to-medium-term financing of the Fund. The Marshall aid programme which was established to meet unusual needs, became a channel for large amounts of U.S. foreign assistance from 1948 through January 1951.

During this period and later, substantial economic recovery was achieved in the United Kingdom, Western Europe and Japan, with favourable effects upon the world economy as a whole. Production increased in many countries, inflationary pressures were met with firmer policies, and governments began to relax their restrictions on the international flow of goods and services. This growing economic strength of many member countries was reflected in the establishment of convertibility for their currencies. By December 31, 1970, 35 members had accepted the cur-

rency convertibility obligations set out in the Fund's Articles of Agreement. In this way, all the major currencies presently used to finance world trade have become convertible.

As members moved toward its objectives, the Fund found opportunities for supporting their efforts in a variety of circumstances. Some countries requested assistance during seasonal declines in their agricultural production, or at times of unfavourable world market prices for their principal export commodities. Domestic inflationary pressures have been an important element in the problems of some countries, and speculative movements of capital have sometimes presented an additional difficulty. The Fund has liberalized its financial assistance, particularly to primary producing countries, by allowing members to draw up to 50 per cent of their quota in compensation for temporary export short-falls beyond their control. In 1969 the Fund also decided to allow drawings of up to 50 per cent of quota to permit member countries to finance participation in commodity buffer stocks organized under international agreements. Drawings under this provision plus the compensatory financing decision may not exceed 75 per cent of quota, but ordinary drawing possibilities are not affected.

In recent years, the Fund has studied the broader question of the adequacy of international liquidity, and its own future role in the functioning of the international payments system. The Special Drawing Rights (a 'basket' of 16 leading currencies of the world, one unit of which in mid-1975 was equal to U.S. \$1.25) were designed to foster this liquidity. Upto January 1, 1972, SDRs totalling 9.5 billion were issued to the Fund members. In mid-1975 the allocation of SDRs remained stationary at the figure of 9.5 billion dollars out of which the less developed areas held an allocation of about 2.4 billion dollars.

The Special Drawing Account, through which all operations and transactions pertaining to SDRs are channelled, was established in July 1969, and is open to all Fund members undertaking its obligations.

With the allocation of SDRs by the Fund, the total stock of international reserves as well as its rate of growth now reflects deliberate international decisions, rather than being determined solely by the availability of gold for official reserves and the accumulation of balances of reserve currencies. The Fund has become an important source of unconditional liquidity, or reserves which countries can use without being subject to any commitment or decisions as to policy. It continues to provide unconditional and conditional liquidity, as in the past, through the General Account of the Fund.

A participant which experiences balance of payments problems is able to use SDRs to acquire foreign exchange from another participant whose balance of payments and reserve position is relatively strong. The Fund exercises control over which participants are designated to provide currency in these transactions. A participant can also use SDRs by agreement with another participant to buy back balances of its own currency held by that participant. The Fund itself accepts SDRs from participants repurchasing their own currencies and paying charges in the General Account.

The IMF has played a commendable role in maintaining international liquidity, providing rational and relatively stable exchange rates and presenting competitive devaluation practices, and in ensuring a reasonable cushion against temporary imbalances in external payments. It is steadily and surely moving away from its public image of being a "club of the rich."

## **International Bank for Reconstruction and Development (IBRD)**

Early in World War II financial experts of the Allied Nations recognized that the post-war world would be in great need of international cooperative arrangements to deal with monetary and financial problems. In July 1944 following several preliminary meetings, the 44 Allied Nations convened the United Nations Monetary and Financial Conference at Bretton Woods, New Hampshire, U.S.A. At this Conference, the Articles of Agreement, or charters, were drawn up for two complementary international financial institutions: the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD, popularly known as the World Bank).



Although the roles assigned to the two institutions differed, their joint objective was to provide the monetary and financial machinery that would enable nations to work together toward world prosperity, thus aiding political stability and fostering peace among nations.

The World Bank was created as a new type of international investment institution to make or guarantee loans for productive reconstruction and development projects, both from its own capital, which would be provided by its member governments, and through the mobilization of private capital. The Bank's share capital was so structured that any risk involved in its operations would be shared by all member governments, roughly in accordance with their economic strength. The bank, although an inter-governmental organization, relies mainly on the world's capital markets for the bulk of its financial resources.

The Bank's first loans, made in 1947 and amounting to about \$500 million, were for reconstruction in four European countries. The task of reconstruction of war-shattered countries was far beyond the existing resources of the Bank, however, and with the advent of the United States Marshall Plan in 1948, the Bank turned its efforts mainly to development lending.

Lending for productive projects which will lead to economic growth in its less developed member countries is the Bank's principal job today. Apart from \$4.2 billion in loans to Europe, Australia, and New Zealand, \$500 million of which was for reconstruction in Europe, the Bank has lent, over the past 27 years, \$2.9 billion to 29 African countries, \$6 billion to 15 Asian countries and \$6.5 billion to 22 countries in the Western Hemisphere. Loans have been made for electric power, roads, railways, ports, natural gas pipelines, telecommunications, agriculture, industry, water supply, education, family planning and, in a few cases, more general programmes of development, including industrial imports.

Two financial affiliates of the Bank have been established: the International Finance Corporation (IFC), which became operational in 1956, and the International Development Association (IDA), which became operational in 1960. These two institutions and the Bank itself form the World Bank Group.

Membership of the Bank is a requirement for membership in IFC, which works specifically with the private sector in developing countries, and in IDA, which operates in the same sectors and with the same policies as the Bank, but whose loans (known as "credits") are provided only to the poorer developing countries on easier terms than conventional World Bank loans.

The Bank has also sponsored the international Centre for the Settlement of Investment Disputes (ICSID).

The Board of Governors has power to admit new members, and to determine the conditions of their admission. However, in order to be eligible for Bank membership, a country must join the International Monetary Fund, which involves agreement to observe accepted rules of international financial conduct. By December 31, 1973, there were 123 members.

The political regime or economic systems of a country do not bar membership in the Bank and there is thus no bar, for example, to socialist countries' membership in the Bank or the IMF. Any country is free to apply for membership, if it wishes to do so.

In addition to the Soviet Union, three countries with centrally-planned economies participated in the Bretten Woods Conference. The Soviet Union never joined the Bank. Czechoslovakia, Poland and Yugoslavia were among the original members and Cuba joined in 1945. Poland and Cuba withdrew from membership, and Czechoslovakia was suspended because of failure to pay the balance due on its capital subscription and it ceased to be a member on December 31, 1954. Yugoslavia has remained a member, and is the Bank's largest European borrower. In addition, Rumania joined the Bank in 1972.

The subscription of an applicant for membership is fixed after consultation between the Bank and the applicant and approval by the Bank's Board of Governors. In general, it is based on the economic and financial strength of the member and is linked to the member's financial participation (called "quota") in the IMF. Upon joining the Bank a country pays 10% of its subscription. One percent of this amount is paid in gold or United States dollars and is freely usable in the Bank's operations. The other 9% is paid in the country's own currency, and is

available for lending only with the consent of the member. The remaining 90% is not paid but may be called by the Bank if required to meet its obligations arising out of borrowings or guaranteeing loans.

Individual members' voting power is linked to the size of their subscription to the Bank. Each member has 250 votes plus one additional vote for each share of stock held. The value of each share is \$100,000.

All powers of the Bank are vested in a Board of Governors, which consists of one Governor appointed by each member country. The Board meets once a year and in the interim votes by mail or cable on matters requiring its action. With the exception of certain powers specifically reserved to them by the Articles of Agreement, such as decisions on membership, allocation of net income, and changes in the capital stock, the Governors have delegated their powers to a board of Executive Directors who perform their duties on a full-time basis at the Bank's headquarters in Washington, D.C. The Directors normally meet once a week. Five of these Directors are appointed by the five largest stockholders and the remainder (now numbering 15) are elected by the other members.

Voting by the Executive Directors is weighted; each Director's vote is the sum of the voting power of the member country or countries he represents. All votes by an elected Director must be cast as a unit. The Directors choose the President of the Bank who, subject to the decisions of the Directors on questions of policy, is responsible for the conduct of Bank business and for the organization, appointment and dismissal of officers and staff. Only the President can propose loans.

Policy is broadly decided by the Executive Directors within the framework of the Bank's Articles of Agreement. Bank policy is an evolving process. The Articles of Agreement are general enough to give the Bank flexibility in its operations, so that it can adjust its policies to the realities of a changing world. Normally a detailed analysis of any policy adjustment is presented by the President of the Bank to the Executive Directors for their consideration and decision.

There is no statutory or other provision that the President of the Bank should be an American, although the United States is the Bank's largest shareholders, with 23% of total voting power.

Upto the present time, there has been an informal understanding among governments that the Bank President shall be an American, and the Managing Director of the International Monetary Fund a European.

Under its Articles, the Bank cannot be guided in its decisions by political considerations; they must be based on economic criteria alone. The Bank is further required not to interfere in the domestic politics of member countries. These prohibitions, however, do not mean that it must not take into account political situations or developments in member countries which may have an impact on their economic situation. Economic policy may be linked to political policy and thus Bank decisions may be influenced by or have an influence on the domestic affairs of a country.

The Bank's political impartiality derives from its status as an international organization, jointly owned by its member countries (of which there were 123 by December 31, 1973). The Bank's impartiality gives it a definite advantage in doing a job where success depends on a cooperative partnership between the Bank and each of its members. The Bank frequently gives member countries advice on their economic policies, mainly through its periodic economic reports; such advice is more likely to be accepted when borrowers are aware that the adviser has no political motives. Its political impartiality gives the Bank the maximum degree of operational flexibility; its contribution to the world development effort is not compromised by the intrusion of political considerations.

The formal agreement between the United Nations and the Bank (dating from November 15, 1947) recognizes the operational independence of the Bank. At the same time, the Bank maintains a close relationship with the United Nations. It has an office at UN Headquarters, and staff members are permanently assigned as liaison between the UN and the Bank,

attending, or arranging for attendance at, all United Nations meetings dealing with questions of interest to the Bank. The President of the Bank is a member of the Administrative Committee on Coordination, whose Chairman is the Secretary-General of the UN and whose other members are the heads of all the Specialized Agencies; he makes an annual report to the UN Economic and Social Council on the Bank's activities.

There is a close working relationship between the World Bank and the I.M.F. The International Monetary Fund and the World Bank were founded at the same time to promote related objectives. As their formal titles indicate, the Fund's main concern is with monetary affairs, and the Bank's with economic development.

The main objectives of the Fund—the promotion of international monetary cooperation, the encouragement of expansion and balanced growth in international trade, the promotion of exchange stability, the elimination of exchange restrictions and the correction of balance of payments disequilibrium—complement the Bank's efforts to promote economic growth in member countries through its loans for productive development projects.

The two institutions cooperate increasingly closely on operational and analytical matters, hold joint annual meetings and are housed in neighbouring buildings; each keeps the other closely informed of its work in member countries. Of the Bank's 20 Executive Directors, three are also Executive Directors of the Fund.

## LOAN POLICIES AND PROCEDURES

The LOAN POLICIES AND PROCEDURES of the World Bank are very reasonable and the developing world cannot really complain.

Except in special circumstances, a World Bank loan must be for a specific project in a member country, or a territory controlled by a member.

The project which the loan will assist must be technically and economically sound, and of high priority for the economic development of the country. The Bank must be satisfied that the project will be well-managed, both during its implementation and after its completion. There must be reasonable assurance that the loan will be repaid, and the loan must not impose an undue burden on the economy of the borrower. The Bank also ascertains that the prospective borrower cannot obtain finance on reasonable terms from other sources.

The Bank lends either to governments of member countries or to public or private organizations which can obtain the guarantee of the member government controlling the territory where the project to be financed is located. This guarantee requirement is imposed by the Bank's Articles of Agreement. The Bank's loan usually consists of part or all of the foreign exchange costs of the proposed project, but may in certain circumstances also cover some local currency costs. The Bank may lend to any member country, either for reconstruction or for development, but it has concentrated for over 20 years on development, and most of its loans since 1948 have been made to its poorer (developing) member countries rather than to the richer (developed) countries. The richer countries can usually find reasonable alternative sources of funds, and thus would not be eligible for World Bank loans.

The Bank does not have a rigid definition of what constitutes a developing country. Its lending policy towards individual member countries is based broadly on the criteria listed in answers to a questionnaire. Some former borrower countries have become economically strong enough to finance development projects on reasonable terms from their own resources, or from external sources other than the Bank. At this stage, the Bank will usually make no further loans. But the Bank remains ready to consider a loan whenever a country cannot obtain finance on reasonable terms for a suitable development project from other potential lenders.

The Bank's Articles of Agreement require it not to act from political motives in its lending to member countries; economic considerations only must be taken into account.

The economic considerations which the Bank has to weigh when analyzing a loan must, of course, include—as background—assessments of the broad economic strategy in the borrowing country, and the quality of its economic management. The Bank also takes into account the

ability of the borrower to meet repayments, and the technical, organizational managerial, operational and financial aspects of the project itself. To this extent, therefore, the Bank must form a judgment on issues connected with a borrowing country's political situation. But it cannot refuse to lend to a particular country because of the political complexion of its government. By the same token, the Bank's decision to make a loan does not in any way imply that the Bank necessarily approves of the political system of the borrowing country concerned.

As far as expropriation is concerned, the Bank is neutral in this matter. It is, however, concerned that the expropriator shows good faith by taking serious steps to reach agreement on the payment of fair compensation, and it may refuse to lend to members who fail to make reasonable efforts to settle expropriation claims or similar disputes.

Bank loans cannot be used to finance purchases of armaments.

## ECONOMIC APPRAISALS

The Bank periodically sends economic missions to member countries to assess their developmental progress and problems, and their economic policies. These assessments include analysis of governments' fiscal and investment policies, their development planning, the achievement of plan targets, the pattern of public expenditure, the uses to which external assistance is put, the mobilization and allocation of available domestic resources, the effectiveness of foreign trade and investment policies, and institution-building programmes, and so on. As a result of these missions, the Bank often recommends to the host country certain policy changes which it believes would further the country's economic development.

After a project has been identified, it is appraised by a team of Bank specialists, sometimes with the aid of staff from other UN agencies or outside consultants hired for the purpose. The team examines in detail the following aspects of the project:

- 1) Economic, including the demand for the goods or services the project will provide, the extent to which the project will employ domestic resources (including labour) which would otherwise be unutilized, the balance of payments effects of the project, and the relative merits of different ways of producing the goods and services required. A comparative analysis is made of the likely economic costs and benefits.
- 2) Technical, including examination of the detailed plans for the project's construction and operation, the location, scale, layout and design of the project, the types of process and equipment to be used, the timing of the project, and the availability of factors of production and of technical staff. Cost estimates are also examined in detail, and provision for general cost increases and contingency allowances are checked.
- 3) Institutional, managerial and organizational, including the availability and/or training of qualified local management, the possible need for providing outside management or advice in the early stages of the project, the project's staff structure, and the freedom of management from undue external pressures.
- 4) Procurement and commercial, including all arrangements for buying and selling, both of the materials needed during the implementation of the project, and of the inputs required and output expected after its completion. The Bank normally requires international competitive bidding for project construction and equipment but allows a margin of preference to local suppliers for all but construction works.
- 5) Financial, including assessment of the funds needed during project implementation and their source, and of the project's operating costs, revenues and prospective liquidity after completion. The Bank usually provides only a part or the whole of the foreign exchange component of a project's total cost; arrangements for the provision of the remaining finance are examined.

After the Bank and the borrower have jointly satisfied themselves on all relevant factors, the negotiation of the loan is undertaken. At this stage, any special requirements of the Bank or the borrower are discussed and agreed. Following successful negotiation, the loan is presented to the Bank's Executive Directors in the form of a President's report. The presentation to the

Board includes detailed reports on the country's economy, the technical description of the proposed project, and the detailed legal aspects of the loan agreement. These reports are commonly amplified by the staff in response to questions from the Directors.

If the Directors approve it, the loan is formally signed by persons empowered to act for the lender and borrower. The loan documents are registered with the United Nations.

## R E F U S A L S

The Bank may refuse loans for a number of possible reasons. The Bank might consider that the potential borrower could obtain finance for the proposed project from other sources on reasonable terms; in this case, the Bank is obliged by its Articles not to lend in order to conserve its resources for more needy borrowers and in order not to compete with other capital suppliers. It might consider the prospects of repayment too uncertain, and refuse on the grounds of common prudence, which its Articles enjoin it to observe.

The Bank might also refuse a specific loan request because it considered the proposed project to be of insufficiently high priority for the potential borrower's development, or to be unsound, too ambitious or badly prepared. If it thinks the project can be "rescued", the Bank will often assist the member country in revising the project to make it economically viable.

Another reason for refusal to lend might be that the proposed project was in a sector in which the Bank was not involved. In the case of some sectors (oil exploration, for example), the Bank feels that adequate funds are usually available from other sources; in others, the Bank does not yet feel that it yet has sufficient expertise to supervise the loan although the range of its activities has been steadily expanding in recent years; in some cases, the Bank does not consider the sector concerned to be of sufficiently high developmental priority to warrant Bank involvement.

The rate of interest at which the Bank lends money is quite crucial for the developing world. Now the Bank raises most of the money it lends to developing countries through its own borrowings from investors who buy its obligations. Investors require a competitive yield on the money they lend to the World Bank or to any other borrower. In order to offset the cost of its own interest payments to those who buy its obligations, the Bank must in turn charge interest to those who borrow from it.

The Bank's ability to raise funds in the capital markets of the World depends largely on the soundness of its investments. Because the Bank does maintain a sound financial position and can thus command the highest investment quality rating on its bonds, it can and does borrow in the capital markets of the world at the lowest available rates. The Bank lends to developing member countries at or near the rate of interest it itself pays—a level of interest cost lower than these countries could, on their own credit, command in the market if they borrowed directly from it. In fact, many of these countries have no access to world capital markets.

The Bank charges interest only on the portion of each loan which has been disbursed. It applies a small commitment charge (currently  $\frac{3}{4}$  of 1%) on committed but undisbursed sums. In mid-1975, its rate was  $8\frac{1}{2}$  per cent and the Bank reportedly took a decision to open a "third window" for providing loans to the more needy developing country at a  $4\frac{1}{2}$  to  $5\frac{1}{2}$  per cent rate.

The Bank has offices in Paris, London, Tokyo and at the headquarters of the UN in New York. It also maintains an office in New York's financial district. The Bank maintains Permanent Missions in Eastern Africa with headquarters in Nairobi, Kenya, and in Western Africa with headquarters in Abidjan, Ivory Coast; their main purpose being to assist the countries in those respective areas in the identification and preparation of projects for financing. The Bank also maintains missions in Afghanistan, Bangladesh, Colombo, Ethiopia, Ghana, India, Nepal, Nigeria, Pakistan, Sudan, Tanzania, Zaire and Zambia to give special assistance to the governments in relation to Bank-assisted projects. The Bank maintains a Resident Staff in Djakarta, Indonesia, and a Regional Mission in Bangkok, Thailand, to assist (in the former case) the government and (in the latter case) the immediate region in formulating development projects and also to provide technical assistance in economic and financial matters.

The Bank realizes the burden of borrowing costs on the foreign exchange resources of the developing countries, and tries to keep its lending rate as low as is compatible with the maintenance of a sound financial position, on which its own ability to raise money in the capital market depends. For example, in the fiscal year ended June 30, 1973, the average cost of money raised by the Bank in the capital markets was 6.93%. In the previous year, it was 7.38%. Since the Bank has substantial income from its own capital and reserves, it was able, for short periods at least, to "subsidize" its lending rate of 7½%.

## **International Finance Corporation**

The International Finance Corporation (IFC), established in 1956, is the member of the World Bank Group that encourages the growth of productive private enterprise in the developing countries.

Membership in IFC is open to all governments which are members of the World Bank. On June 30, 1974, the Corporation had 99 member countries.

IFC has total resources of approximately \$862 million. That amount is made up of the Corporation's capital of \$107 million, subscribed by its member countries, accumulated earnings of some \$65 million, ability to borrow up to \$685 million from the World Bank and a \$5 million loan from the Netherlands. These resources are augmented through repayments of IFC Loans, which, as of June 30, 1974, totalled \$83 million, and sales by IFC of its own investments to other investors.

IFC can offer other resources to local and foreign entrepreneurs, sponsors, technical partners and similar investors associated with its projects. For example, the Corporation has expert knowledge on financial, legal, technical and related aspects of private enterprise in developing countries. IFC can also draw on the World Bank's wide experience, as well as on its own contacts with financial institutions, business concerns, economic development agencies and governmental organizations.

**The Corporation encourages private enterprise in the developing countries principally by itself investing in projects that either establish new businesses, or expand, modernize or diversify existing businesses.**

Besides making its own investments IFC can recruit capital from other sources, local and foreign, and obtain managerial and technical support for a project.

IFC considers investment proposals from two points of view: that of an investment banker and that of a development institution. Every project in which IFC invests should meet three basic conditions:

- (i) It should have the prospect of earning a profit.
- (ii) It should benefit the economy of the host country; for example, by earning or saving foreign exchange; by producing needed goods and services, increasing employment, advancing technology, developing natural resources on terms fair and reasonable to all parties, or by making other contributions to economic growth and improvement.
- (iii) Local investors should be able to participate in the project, at the outset or later.

Investment proposals made to IFC should also meet certain other conditions:

The funds needed are not available on reasonable terms from private sources; IFC's object is to mobilize and supplement private capital, not to compete with it.

The financial plan for the project is realistic.

There is a market for the company's products or services.

Management is capable and experienced. IFC assistance can include advice on the technical features of a project, or on its organizational, managerial and marketing aspects.

The sponsor of the project has a substantial shareholding in the enterprise.

IFC also provides help for private enterprise in the developing countries by undertaking standby or underwriting commitments in support of public offerings or private placements of

shares or other corporate securities, with the object of making them available to local investors.

Through its Capital Markets Department, IFC provides advice and financial support for the establishment of institutions in the developing countries to mobilize and allocate domestic savings and to make possible the sale and purchase of securities by local investors.

In addition to making its own direct investments, IFC invests in regional and local development finance companies which, in turn, make smaller investments in the private sector in the developing countries than it is practicable for IFC itself to do.

To resolve its funds and to encourage the growth of a market for the types of securities in which it invests the IFC sells portions of its investments to other investors when it can do so on satisfactory terms.

Other investors can participate in an IFC commitment to a venture on the same terms as the IFC by purchasing part of the IFC loan or equity holding in a project at the time the investment is made, or later.

Whenever feasible, the IFC will sell its shares to private investors in the country in which the enterprise is located. In a privately negotiated sale, it will not sell its shares to investors to whom its investment partners object for valid reasons.

The IFC is prepared to support "mixed" enterprises, i.e., a joint venture between private enterprise and a government. Each case is examined in the light of such factors as the extent of government ownership and control, the nature of the enterprise and efficiency of management. IFC will invest in a project only when there is no objection on the part of the host government. On the other hand the IFC does not seek or accept government guarantees of repayment on its investment. The IFC is ready, if asked, to advise member governments upon policy relating to private investment.

The IFC as an international organization established and financed by a number of governments, with most of them in the developing world, can be uniquely effective link between investors and host countries.

Both local and foreign investors have come to regard IFC as an honest broker. Local investors look upon IFC as a partner who can deal with large international corporations on equal terms, whereas they themselves may not be able to do so. Foreign investors often find IFC a useful partner in situations where they may be unfamiliar with local laws and customs and with the local political and economic system.

The IFC is one of the very few international development organizations that makes equity investments. Its typical investment is a share subscription combined with a long-term loan. When there is no need for an IFC loan, it will make a share subscription only. Alternatively, when sufficient equity is available and loan funds at reasonable terms cannot be obtained elsewhere, the Corporation will make a straight loan. The form of investment, the investment mix and terms depend on the circumstances, risk and prospective return in each case.

Equity investments are made in the currency of the country in which the project is located.

Loans are usually expressed in U.S. dollars. In appropriate cases they may be in other convertible currencies.

Loans normally run for a term of seven to twelve years, at fixed interest rates related to the circumstances of each transaction, and with repayments made semi-annually after an agreed grace period. A commitment fee at the rate of one per cent per year is charged on the undischarged portion of a loan.

Altogether the IFC follows a flexible policy and, within the limits of its resources and its investment conditions, is prepared to do whatever needs be done to get a sound enterprise moving.

The IFC does not take part in management of the enterprises it assists. However, in the case of development finance companies, an IFC representative on the board of directors can contribute IFC experience and expertise as a supplement to local knowledge. A similar contribution can often be made to a promotional company, and in such cases IFC may also seek

representation on the board. The Corporation exercises its voting rights as a shareholder only in exceptional cases.

There is no standard form of application for IFC financing. However, certain preliminary information is needed to enable the IFC to decide whether an investment proposal warrants consideration. Such information should include at least the following:

- a brief description of the proposed project and the technology involved;
- the market envisaged, potential competition and export opportunities; and
- the estimated total cost and amount of finance needed, with an indication of the proportion to be provided by the sponsors.

The Corporation invites proposals for projects from any quarter. Proposals may be made by writing to any of the Corporation's offices.

## **International Development Association (IDA)**

The International Development Association (IDA) is an inter-governmental agency making concessionary loans to its poorest member countries for sound, productive, high-priority economic development projects. (Concessionary loans are ones whose terms impose a relatively light burden on the borrower, either by bearing a very low rate of interest or by being repayable over a very long period of years, or both).

IDA is an affiliate of the World Bank, and was established in 1960 and at the end of 1973 had 112 members. The Bank, through its own activities and contacts in the developing world, had become increasingly aware of the urgent need for an institution that could provide development finance on terms more lenient and bearing less heavily on the balance of payments of developing countries than even the Bank's own loans—which themselves contain a concessionary element.

The debt-servicing problem in many low-income countries, already severe in the early 1960's, has made it increasingly difficult for such countries prudently to finance their development with loans on conventional or near-conventional terms. To rise or even maintain their rate of economic growth, these poorer countries must obtain an increasing proportion of the external financial assistance they need on concessionary terms. IDA, therefore, provides a welcome and urgently needed supplement to the Bank's own development lending activities.

IDA's establishment was largely a result of an initiative by the United States after careful consideration in the Economic and Social Council.

The global need for concessionary financing, such as IDA provides, has been increasing for two reasons:

- 1) Many of the recently independent countries, especially in Africa, are very poor and as yet have very little productive capacity. It will, therefore, be some years before they can service the substantial external assistance they need on conventional terms.
- 2) Because of the terms on which capital has been lent to them in the past, a number of developing countries already have, or are building up, an intolerable debt burden. Their debt-service payments are often rising more rapidly than their earnings of foreign exchange from exports. Some countries now devote 20% or more of such earnings to the servicing of their debts.

All IDA's development credits to date have been for terms of 50 years and bear no interest. After a 10-year period of grace, 1% of the credit is to be repaid annually for 10 years, while in the remaining 30 years, 3% is to be repaid annually. IDA makes an annual service charge of 3/4 of 1% on the disbursed portion of each credit, to cover its administrative costs.

There is nothing sacrosanct about these terms. The Articles of Agreement provide that IDA's terms should be "more flexible and bear less heavily on the balance of payments than



those of conventional loans." IDA could, therefore, charge interest at any rate below the conventional level which it regards as appropriate.

IDA's funds have been obtained from five sources: members' initial subscriptions, periodic "replenishments" provided by its richer members, special contributions made by some members, transfers of income from the World Bank, and IDA's own accumulated net income.

IDA's membership of 112 countries is divided into two categories: "Part-I"—IDA's relatively developed or high-income members—and "Part-II"—countries, comprising IDA's poorer, or relatively less developed members. Each Part I country pays its entire subscription in convertible currency, all of which may be used by IDA for its lending. Each Part II country pays only one-tenth of its subscription in convertible funds; the remaining nine-tenths are paid in the member's own currency and may normally not be used by IDA for lending without the member's consent. Ten Part II countries have released all or part of the remaining 90% portions of their subscriptions for use by IDA under various terms and conditions.

Subscriptions to IDA have totalled about \$1,061 million so far. Of this total, \$906 million has been subscribed in convertible currencies which the IDA can use in its lending operations, while \$274 million has been paid in the currencies of less developed members, which are not yet available for lending.

The first general replenishment of about \$750 million was provided by the 18 Part I countries in 1964-67. In 1969 there was a second replenishment of \$1.2 billion by the 18 Part I members and Switzerland, a non-member. The third replenishment was over \$800 million for the 3 years ending June 30, 1974 and this time 5 non-members of Part I also contributed.

By June 30, 1973, the World Bank had made transfers totalling \$705 million to the IDA out of its net income, of which \$3 million had been earmarked for agricultural research. Subsequently, in September 1973, the Bank made an additional transfer of \$110 million from its fiscal 1973 net income, of which \$3.2 million was allocated for agricultural research.

Accumulated net income of the IDA totalled \$71.4 million as of June 30, 1973. This total amount was allocated for further use in IDA commitments.

Governmental, public or private entities in the developing world can borrow; in practice, all IDA "credits" (as IDA commitments are known, to distinguish them from Bank loans) have been made to governments.

The basic reason for setting up a concessionary lending affiliate of the World Bank was that some developing countries were too poor even to service new debt on "conventional" World Bank terms (which, as noted above, themselves contain a concessionary element). Therefore the IDA has generally limited its lending to the poorest of its member countries; the guidelines generally used is that IDA credits are made to those of its members whose per capita Gross National Product is below a level of about US \$375 equivalent.

Under certain circumstances, low-income countries may receive a "blend" of conventional World Bank loans and IDA credits. This affords the Bank Group an important degree of flexibility in its response to the individual needs of its developing member countries. "Blending" of Bank and IDA lending may be undertaken when a country's per capita GNP is marginally above the IDA limit, but where the problem of debt servicing is nevertheless serious. Blend countries typically receive IDA credits for some projects and Bank loans for others; but sometimes a single project will be assisted with an IDA credit for part of the costs, which the Bank Groups is willing to finance, and Bank loan for the rest.

IDA also insists on certain criteria for lending to a specific country. Service payments on IDA credits are in foreign exchange, not in local currency. IDA is, therefore, deeply concerned with the ability of the borrower to incur new debts and make repayments in foreign exchange; this depends on (i) the level and structure of the borrower's existing and potential debts to other external creditors, and (ii) its economic performance.

A country lacking the repayment capacity to borrow all the capital it could effectively use on conventional, or Bank, terms may nevertheless have good prospects for economic growth if its domestic savings can be supplemented by foreign funds. Such a country is eligible for IDA

credits, provided its economic performance is satisfactory.

World Bank/IDA staff undertake regular economic missions to member countries to assess their development progress and problems, and their economic policies. These assessments include analyses of government's fiscal and investment policies, their development planning, the achievement of plan targets, the pattern of public expenditure, the uses to which external assistance is put, the mobilization and allocation of available domestic resources, the effectiveness of foreign trade and investment policies, of institution-building programmes, and so on.

In this way, IDA is able to keep a running check on the performance of borrower countries, and to ensure that they are not overburdened with debt or pursuing unsound economic policies.

There are various good reasons for the heavy concentration of IDA aid to India and Pakistan—especially in IDA's early years. India and Pakistan, each with a per capita income of around \$100 a year, are among the poorest countries in the world. They are—or were, before Bangladesh, formerly East Pakistan, became independent—also among the biggest in terms of population. India and Pakistan (when the latter was composed of the East and West wings) together accounted for more than 53% of the population of the developing countries eligible for IDA credits. The economic infrastructure of both countries and the trained civil service available are such that these countries can (and could from the start of IDA's operations) make effective use of large amounts of assistance.

It is largely for these reasons that so great a proportion of IDA lending has been committed in India and Pakistan. But that percentage is dwindling. It stood at more than 62% of the total in 1971; but it now amounts to little over 52%.

IDA's lending operations have also become more diversified geographically. Credit to African countries have increased greatly in recent years. Indonesia, too, has become a large borrower of IDA funds; since 1968 almost \$500 million in IDA credits have been committed for that country's development.

There are three major potential constraints on IDA's expansion: the ability of borrowers to use IDA credits effectively, the ability of the Bank/IDA staff to process a larger volume of business without jeopardizing their high standards of appraisal and supervision, and the willingness of IDA's richer (Part I) members to contribute sufficient sums to the Association.

The first of these constraints has diminished greatly in recent years. As noted above, the ability of borrowers to put IDA funds to productive use has grown enormously since IDA's early days. Today, indeed, there are more suitable projects available than funds to promote them; at the same time, as countries' debt-service burdens become heavier the need for concessionary finance of the kind IDA can provide is becoming more and more urgent.

The second possible constraint—the ability of the staff of the Bank and IDA to process a larger volume of new credits—has been relieved by an intensive and successful programme for recruitment of new high-calibre staff. The Bank Group is confident that it can handle an increased volume of business, and that it can do so without any diminution of the strict standards of sound financing and careful project evaluation which have always been among its greatest strengths.

The third constraint—the problem of obtaining sufficient funds—is the most important of the three. IDA depends very heavily on the contributions of its richer members for its lending resources. Transfers from World Bank net income alone cannot support IDA at any meaningful level of operations. The Bank's total net annual income during last fiscal year represented slightly less than one-seventh of IDA's lending during that year, and the Bank's own security would be compromised if it did not apply some of its income to its reserves.

### **World Bank Group and Pakistan,**

The World Bank Group has had a long and close association with Pakistan. The first World Bank loan was made in March, 1952, and since then the World Bank and its affiliates, IDA and IFC, have invested more than \$1 billion in projects in Pakistan (excluding assistance to the former East Pakistan).

Perhaps the most outstanding projects which have been developed through World Bank and Pakistan association have been the establishment of the Indus Basin Development Fund and the Tarbela Development Fund. The impact of these projects on the economy will be considerable. An indication of the magnitude of these two projects is that the electric power alone to be generated as a direct result of their implementation will exceed the existing power generating capacity of the whole country.

After many years of long and complicated negotiations carried out with the World Bank's good offices, an agreement was reached between India and Pakistan in 1960 on the sharing of the waters from the Indus and its five tributaries. The treaty provides that Pakistan will have the use of the Indus and its western tributaries, Jhelum and Chenab. India undertakes not to restrict the flow of these rivers upstream from the border, but is allowed some specified use for irrigation, etc. The waters of the three Eastern tributaries of the Indus—the Ravi, Beas and Sutlej—are allocated to India, but during a transition period of ten years, water continued to be delivered to Pakistan according to a specified schedule.

In order to implement the provisions of the Treaty, it was necessary to construct dams, barrages, and a series of eight link canals, totalling nearly 400 miles, to transfer water from the Indus, Jhelum and Chenab in order to meet Pakistan's irrigation needs. These works, now substantially complete, took some 12 years to construct and represented the largest programme of civil works ever undertaken anywhere in the world. A total of nearly \$1,600 million was made available to finance this work under the Indus Basin Development Fund to which both India and Pakistan contributed, in addition to grants made by Australia, Canada, Germany, New Zealand, the United Kingdom and the United States, and loans by the United States and the World Bank/IDA. Pakistan's own contribution was in excess of the equivalent of \$400 million, while the World Bank lent \$138.5 million and acts as Administrator of the Fund.

The biggest single project under the Fund's programme was the construction of the 8,400-foot-long Mangla Dam on the River Jhelum. It is believed that at the time it was made (January 1962), the contract for the dam was the largest single contract ever let on a unit price basis; the total amount of the contract was \$354 million, although the total cost of all elements of the project came to about \$520 million. The dam came into operation in November 1967. The storage reservoirs of the Mangla and of the Tarbela dams (see below) will provide water during the dry season for the country's irrigation system which commands 33 million acres and is the largest integrated system in the world. In addition to its main functions of providing irrigation and power, the Mangla Dam has proved helpful in the regulation and control of the flood waters of the Jhelum River, particularly during the devastating floods of August, 1973.

Provision was also made under the Fund for a study of the water and power resources of Pakistan to be carried out by the World Bank. The study was completed in July 1967 and constituted a comprehensive programme for the utilization of Pakistan's water and power resources; it also confirmed that high priority should be accorded to the Tarbela project.

### LARGEST IN WORLD

Among the works specified in the Indus Basin Development Fund agreement of 1960 to be financed by the contributing countries was a dam to be built on the Indus River near the village of Tarbela. The Tarbela Dam, which is 9,000 feet in length, is the largest earth and rock filled dam in the world. The gross storage capacity of the dam amounts to 11.1 million acre feet. It is contemplated that 12 generators, each of 175,000 kilowatts, will be installed at Tarbela, the first six of which are expected to be operational by 1978. Completion of all 12 units is expected by 1981, at which time their total generating capacity will amount to 2,100 MW or about 25 percent of the total capacity expected in that year for all Pakistan. At the peak of construction about 20,000 people were engaged on this project. The World Bank has acted as Administrator of the Tarbela Development Fund along lines generally similar to its responsibility under the Indus Basin Fund.

The total cost of the Tarbela Dam is about \$1.1 billion, excluding land acquisition and the provision of the generating units. (The first six generating units are being financed by Japan and

the Asian Development Bank). In addition to approximately \$340 million being made available for Tarbela out of the Indus Basin Fund, contributions have been made by Canada, France, Italy, and the U.K.; the U.S. and the World Bank have made available \$50 million and \$25 million respectively for foreign exchange costs not covered by the other sources of finance. Pakistan is financing the entire local cost amounting to more than \$400 million. Water from Tarbela should be available for irrigation in 1975-76.

In the field of agriculture the World Bank Group has, in addition to the Indus Replacement Works and Tarbela Dam, provided \$35 million for flood rehabilitation in Punjab and Sind in 1973, \$18 million for curing salinity and waterlogging in Khairpur Division by installing 700 electrically operated tube-wells and pumping plants for heavy drainage and irrigation, \$56 million to the Agricultural Development Bank of Pakistan, and is seriously considering a project related to an accelerated programme of waterlogging and salinity control in Pakistan. The World Bank itself is now largely concentrating its activities in Pakistan on agriculture and family planning. Since 1957 upto the middle of 1974 PICIC received \$209 million from the World Bank which enabled it to finance more than 800 projects at cost of Rs. 4 billion.

In addition, credits have been made by the Bank Group for the Industrial Development Bank of Pakistan and for setting up two industrial estates for small and medium-scale industries at Gujranwala and Sialkot near Lahore.

### AGRICULTURAL PRODUCTION

An important industrial sector assisted by the Bank is that of the production of fertilizer, the use of which by farmers is so vital to achieving increased agricultural production. Although, in terms of nitrogen, domestic production of fertilizer grew from just under 10,000 tons in 1960-61 to 50,000 tons in 1967-68 there was a great need for additional supplies. Accordingly, the Bank has contributed to the financing of two fertilizer plants—a loan of \$32 million and an IFC investment of \$2.9 million were made for the Dawood Hercules plant in 1968. The plant came into production in November 1971 and today produces 345,000 tons of urea annually, equivalent to well over half the total fertilizer output in the country.

Demand for fertilizer continues to be considerably in excess of domestic supply. To help meet part of Pakistan's needs the Bank in 1974 lent \$35 million for the Pak-Arab Fertilizer plant in Multan. The Pak-Arab project, with an estimated total cost of over \$100 million, will on completion in 1976 add 200,000 nutrient tons of nitrogen and 70,000 nutrient tons of phosphate to Pakistan's existing fertilizer production. The Asian Development Bank had made two loans, totalling \$27 million for the project and the Abu Dhabi National Oil Corporation has agreed to invest \$31 million. The Government's contribution amounts to \$33 million.

In addition to loans and credits for specific projects and to PICIC, the industrial sector in Pakistan has benefited from three credits totalling \$119 million for industrial imports. These credits provided the foreign exchange needed by manufacturers in selected industries for the import of raw materials, component and spare parts. Among the industries included under these credits were fertilizers, textiles, chemicals, paper, leather goods, plastics and engineering. The foreign exchange thus made available permitted manufacturers to make fuller use of their existing capacity.

The National Development Finance Corporation (NDFC) was established by the Government in 1973 primarily to assist in financing public sector undertakings. The Bank has in 1975 given \$30 million to this new organization.

The World Bank affiliate, the International Finance Corporation (IFC) has made investments in Pakistan totalling some \$28 million in nine companies engaged in the following fields: development banking (PICIC), steel, textiles, cement, paper and fertilizers. The IFC, in addition to being a shareholder in PICIC, has joined with the Corporation in financing several industrial enterprises in Pakistan.

The World Bank has made five loans to the Sui Gas companies totalling \$58 million. The first loan was made in 1954 to assist in financing the transmission line from Sui to Hyderabad and Karachi and the construction of a gas purification plant. The other four loans helped to

finance the expansion of the capacity of the gas transmission system and its extension to different parts of the country.

Railways have till mid-1974 received \$133.2 million, roads and vehicles \$40.2 million (including \$17 million for the Karachi-Hyderabad highway), power \$74.7 million, Education \$12.5 million (from IDA for Lyallpur Agricultural University, Engineering College at Karachi, and other technical institutions), and the Karachi Port \$66.6 million from the World Bank Group.

## CONSORTIUM

In 1960 the World Bank established a Consortium for Aid to Pakistan. The Consortium now consists of 11 countries (Belgium, Canada, France, West Germany, Italy, Japan, the Netherlands, Norway, Sweden, the U.K. and the U.S.A.) with the World Bank as its Chairman. In addition to the IMF, the Asian Development Bank, and the United Nations Development Fund, observers from Switzerland and OECD (Organisation for Economic Cooperation and Development) attended the meeting.

The World Bank economic reports, referred to earlier, form an important part of the documentation used by Consortium countries. In addition, the Government of Pakistan provides valuable additional studies prior to Consortium meetings; such studies deal with projects regarded as suitable for financing by Consortium members and specific economic issues.

Consortium meetings not only provide a forum for discussion of the Pakistan economy and aid requirements, but also give senior officials of the Government of Pakistan an opportunity to highlight to the members those aspects of the nation's development and aid needs on which the Government wishes to place particular emphasis.

The Consortium has also proved to be helpful to Pakistan also in obtaining better terms of aid as members have realised the dangers inherent in charging high interest rates and in making loans with too short maturities. Finally, it was as a result of a series of Consortium meetings and frequent bilateral discussions between the Bank and individual members, that Pakistan obtained debt relief totalling \$650 million over the four years 1975-1978. The terms of that relief may vary somewhat between countries, but all the relief will contain a grant element of at least 62 per cent. The World Bank has suggested to members that one way of achieving this is to provide terms of  $2\frac{1}{4}$  percent interest, 10 years of grace and 20 years of repayment thereafter. By obtaining assistance on terms of this quality, the requirements of debt service will constitute a considerably diminished percentage of Pakistan's foreign exchange earnings.

The Consortium can be encouraging in difficult times and offers advice which is relevant to the times. For instance, the May, 1974, press release of the Pakistan Consortium meeting at Paris, *inter alia*, stated:—

“The members of the Consortium expressed satisfaction with the effective action of the Government of Pakistan last summer and fall in dealing with the effect of the floods. This, they felt, was a sign of the resiliency which had characterized Pakistan's performance in recent years. They welcomed the measures taken by the Government to contain inflation and took particular note of the policies which it intended to adopt to improve the mobilization of domestic resources, to increase the rate of growth, and to spread the effects of growth more broadly over the population, especially the rural population. The members of the Consortium called particular attention to the need to deal with the population problem, to further increase agricultural yields and production, to reduce under-employment, to improve the investment climate, and to continue to promote exports.”

## Asian Development Bank

The Asian Development Bank (ADB) is an international development finance institution established for the purpose of lending funds, promoting investment and providing technical assistance to developing member countries, and generally for fostering economic growth and cooperation in the Asian region.

The Bank has two noticeable features. First, it is an Asian bank, conceived by the

United Nations Economic Commission for Asia and the Far East (ECAFE); it is located in the ECAFE region; about 62 per cent of its capital is subscribed by 22 countries within the region; the President and eight of the 12 Directors come from the region.

Secondly, unlike certain regional financial institutions, the membership of the Bank extends beyond the region; many countries outside Asia have contributed to the Bank's capital and are represented on the Board of Directors and professional staff of the Bank.

The Bank was formally opened for business on 19 December 1966 with 31 members and its head office at Manila, Philippines.

The Bank has the following functions and objectives:

1. To promote investment in the ECAFE region of public and private capital for development purposes;
2. To utilize the available resources for financing development, giving priority to those regional and sub-regional as well as national projects and programmes which will contribute most effectively to the harmonious economic growth of the region as a whole, and having special regard to the needs of the smaller or less developed member countries in the region;
3. To meet requests from members in the region to assist them in the coordination of their development policies and plans with a view to achieving better utilization of their resources, making their economies more complementary, and promoting the orderly expansion of their foreign trade, in particular, intra-regional trade;
4. To provide technical assistance for the preparation, financing and execution of development projects and programmes, including the formulation of specific project proposals;
5. To cooperate with the United Nations, its organs and subsidiary bodies including, in particular, ECAFE, and with public international organizations and other international institutions, as well as national entities whether public or private, which are concerned with the investment of development funds in the region, and to interest such institutions and entities in new opportunities for investment and assistance; and
6. To undertake such other activities and provide such other services as may advance the purposes for which the Bank was established.

Membership in the Bank is open to:

- (i) Members and associate members of ECAFE; and
- (ii) Other regional countries and non-regional developed countries which are members of the United Nations or any of its specialized agencies.

Admission to membership in the Bank may be obtained upon the affirmative vote of two-thirds of the total number of Governors, representing not less than three-fourths of the total voting power of the members.

The Bank has an authorised capital of \$1,100 million, of which \$1,005.38 million has been subscribed. Of the subscribed capital, one-half is in the form of "paid-in" capital and the other half remains as "callable" capital to serve as security for the obligations of the Bank. The "callable" capital constitutes, in effect, a guarantee of the Bank's securities and will thus facilitate the Bank's borrowing of funds in the capital markets of the world.

The courses open to the Bank to augment its ordinary capital resources are as follows:

1. **INCREASE IN CAPITAL:** The Board of Governors, subject to a two-thirds vote, may increase the authorised capital.
2. **BORROWINGS:** The Bank may sell bonds in the international money markets with the consent of the governments concerned.

The Asian Development Bank has made available to Pakistan \$214.728 million in the Fourth Plan period 1970-75 as against \$4.588 between 1965-70. The management of the A.D.B. under President Takeshi Watanabe, has succeeded in substantially expanding the Bank's operations in a professional manner in the short span of 6 to 7 years.

## **Islamic Bank**

The Islamic Bank was established in 1975 with its headquarters at Jeddah and started working on October 31, 1975. The bank has a capital of two billion Islamic Dinars (one Islamic Dinar is equal to one Special Drawing Right of the International Monetary Fund, while one SDR itself is equal to US Dollar 1.20). The bank started its operation with a total of 735 million Islamic Dinars. Out of 735 million Islamic Dinars, Saudi Arabia made the highest contribution of 200 million, while Libya contributed 125 million, and the United Arab Emirates and Kuwait 50 million Islamic Dinars each.

Fostering economic development and social progress of member countries and Muslim communities, individually as well as jointly in accordance with the principles of the Shariat, are the main purposes of the creation of the Islamic Bank.

The Islamic Bank has six directors, including Pakistan, apart from the four permanent Directors, which are Saudi Arabia, United Arab Emirates, Kuwait and Libya.

The members of the Islamic Bank are: Algeria, UAE, Bahrain, Bangladesh, Chad, Arab Republic of Egypt, Guinea, Indonesia, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, Mauritania, Morocco, Niger, Oman, Pakistan, Qatar, Saudi Arabia, Senegal, Somalia, Sudan, Tunisia, Turkey and the Arab Republic of Yemen.

The bank also satisfies itself that the purpose of the loans is to promote the well-being of the people through economic and social development in making programme loans to member countries including institutions or agencies.

If a member represents that it suffers from an acute foreign exchange stringency and that the service of any loan contracted or guaranteed by that member or any of its agencies cannot be provided in the stipulated manner, the bank may at its discretion modify the terms of amortization or extend the life of the loan or both, provided that it is satisfied that such relaxation is justified in the interest of the particular recipient and the options of the bank.

The bank levies a service fee to cover its administrative expenses. The amount of the fee and the manner of levying is to be determined by the bank.

## **Export Import Banks**

Several industrialised countries have established Export Import Banks which finance the procurement of investment goods to prospective buyers who can obtain their Government's guarantee to the loan agreement. The Export Import Bank of the U.S.A. set the lead and other countries like Japan and West Germany followed suit. The terms of loans extended by Export Import Banks are better than what would be available commercially, but they do not compare well with those extended on a Government to Government basis. The terms offered by the Export Import Banks have steadily deteriorated over the years. For instance, in 1952-53 Pakistan obtained a loan from the U.S. Export Import Bank at 2.5 per cent repayable over 44 years. In the first half of the seventies the terms were 6 per cent interest and an amortization period of 11 years. Yet these terms were no improvement on what could be secured on Export Credits from France, Italy, and Western Germany. But borrowers cannot be choosers.





# National Income

## Concepts and Measurement

As Pigou well puts it, National income is that part of the objective income of the community, including income derived from abroad, which can be measured in terms of money. National income can be interpreted in three ways:

- i) as a total of incomes received by all factors of production (national income)
- ii) as a total of the expenditure of the entire community including Government (national expenditure); and
- iii) as a total value of production of all goods and services (national product).

This threefold interpretation of national income or Net National Product follows from the concept of the circular flow of incomes. Every expenditure on goods and/or services involves the sale of goods and services of that value. Every expenditure also involves the creation of incomes for those who receive it as the value of the goods and services they sell. National income is always computed with reference to a period, generally the calendar year or the financial year. It would be clear that the circular flow of income will inevitably lead to a situation in which national income is equal to national expenditure and equal to national product. Thus over a certain period, say one year, the three measures of national income of a country representing production, distribution and expenditure will be equal in the following respective forms:

- i) total of all incomes accruing to factors of production in cash or in kind (production);
- ii) total of value added in the various sectors of (distribution); and
- iii) total of personal consumption expenditure on goods and services, governmental expenditure on goods and services, and net expenditure and capital goods (expenditure).

The total net earnings received by the factors of production (wages plus interest profits plus rent) for their productive efforts in the economy for a specific period of time is called **national income at factor cost**. That figure of national income from which depreciation has not been deducted is called the **gross national income**. It can also be referred to as **gross national product (GNP) or gross national expenditure**. It is apparent that in the production of gross national product over a year a part of equipment, machinery, etc., is consumed through wear and tear or declines in value during the production process. This consumption of fixed capital, or decline in the value of capital due to wear and tear, is called depreciation. **Net national product** means GNP minus depreciation. Similarly the figures of net national income and net national expenditure would be calculated by deducting the value of depreciation from gross national income or gross national expenditure.

Gross National Product has been defined as the total market value of all final goods and services produced in a year. This is in fact **GNP at market prices**. In practice the gross national product (GNP) is calculated by aggregating the total expenditures on goods and services of individuals, business, government and foreigners incurred in that country over a year. In view of the fact that these are final expenditures, **no single goods or services is counted more than once**. If we exclude foreign trade, all expenditure would be domestic and  $GNP = C + I + G$ , where "C" represents expenditures for consumption, "I" represents expenditure for gross investment (capital equipment, construction, and net addition to stocks), and "G" represents expenditures by government for both consumption and investment. No country, however, is a closed economy and the GNP of every country is affected by exports and imports of goods and services. The

exports of a country including invisibles (such as foreign exchange earnings from trade, travel, insurance, foreign investment, interest on securities, etc.) measures the expenditure by foreigners in the domestic market and should therefore be added to the gross national product. Imports, including invisible imports, are, on the other hand, a measure of the expenditure by individuals, business and government of the country concerned on goods and services produced by the other nations and should, therefore, be deducted to get the figures of domestic gross national product. Thus in an economy which is influenced by foreign trade,  $GNP = C + I + G + X - M$ , where "X" represents export earnings and "M" represents import expenditures.

Gross National product, defined earlier as the total market value of all final goods and services produced in one year, includes two sets of payments which have to be considered before we can arrive at an estimation of what is actually received by the various factors of production, that is, **GNP at factor cost**. These two elements are indirect taxes which are levied by the Government on goods and services, and transfer payments made by the Government in the form of subsidies, social security payments, pensions, and interest on the national debt. In order to secure an estimation of GNP at factor cost we should deduct from GNP the total of all indirect taxes levied by the Government and add all the transfer payments made by the Government. Thus  $GNP \text{ at factor cost} = C + I + G + X - M - A + B$ , where "A" represents indirect taxes and "B" represents transfer payments.

We have noted the concepts of Gross National Product at market prices and GNP at factor cost. Another rather important concept is that of considering **Gross National Product at constant factor cost**. Here a base year is chosen, and the factor costs prevailing in that year taken as the price at which factor costs of subsequent or preceding years are calculated. This gives us an excellent means of comparing the improvements or deterioration in national income as a whole as well as its various components in different years as prices of the factors of production remain constant in terms of the base year and the effects of inflation or deflation are neutralised. We are thus in a position to determine whether there has been a net improvement or net deterioration in national income as a whole or in any of its components.

It should be emphasized that the concept of national income in relation to its various components is determined by the **value added** by that component. In this context it is of the highest importance to **avoid double counting**. For example, when we measure the contribution of the agricultural sector to the national income we should deduct the value of various inputs such as seeds, fertilizers, insecticides and pesticides, land revenue, electricity and water. The difference between the value of the output of agricultural products and the inputs which have made that quantity of agricultural production possible would represent the value added by the agriculture, or in other words the contribution of agriculture to the national income.

There are two other concepts related to national income which are commonly used. One of that is **personal income**. Personal income is equal to national income minus social security contributions minus corporate income taxes minus undistributed corporate profits plus transfer payments. The second concept relates to **disposable income** which implies the amount the individual is left with after paying all sorts of personal taxes such as income-tax, wealth tax, property taxes, etc. Thus  $\text{disposable income} = \text{personal income} - \text{personal taxes}$ . Since disposable income can be either consumed or saved,  $\text{disposable income} = \text{consumption} + \text{saving}$ .

## Measurement of national income

There are three methods of measuring national income: income method, expenditure method and product method.

The **income method** measures the income earned or received; it is the sum total of the income-tax of all individuals of the country. Under this method national income is equal to wages plus interest plus profits plus rent. It includes the earnings of a self-employed people. This method of national income estimation makes it possible to indicate the distributive shares of the different economic classes.

The **expenditure method** estimates national income by adding up all the expenditure made on

goods and services during the year. Since income can be spent either on consumer goods or on investment goods, national expenditure is the total of all consumption expenditure and investment expenditure made by all individuals as well as by the Government during the year. Gross national expenditure at market prices = private consumption expenditure + Government consumption expenditure + gross investment by the private sector + gross investment by public sector + changes in stocks + export earnings — import expenditures. If we deduct indirect taxes and add transfer payments we would arrive at the figure of **gross national expenditure at factor cost**. In order to arrive at the figure of net national expenditure, we should deduct depreciation from the figure of gross national expenditure.

The **product method** approaches national income from the output side. The economy is divided into various sectors, such as agriculture, manufacturing, mining, construction, electricity and gas, transportation and communications, wholesale and retail trade, banking and insurance, ownership of dwellings, public administration and defence and services. The gross national product is determined by adding the net value of all production by all the factors during the year. **Net values** of production of a given sector are calculated by deducting from the gross value of production of that sector the purchases made by it from producers of other sectors. The aggregate of the net values of production of all the sectors of the economy together with the net income from foreign trade transactions (export earnings — import expenditure) will give us the gross national product. By deducting depreciation from this we can get the figure of net national product. This method is also referred to as national income by industrial origin as it traces total national income to the various sectors of the economy. This method of calculating the national income can be used when we have a census of yearly production of the various sectors of the economy. It should be noted that **gross domestic product (GDP)** is the aggregate of the value added in the production process of all the sectors of the economy and does not include net foreign transactions.

## Estimation of National Income in Pakistan

The calculation and estimation of the national income account in Pakistan is the responsibility of the Statistical Division of the Government of Pakistan. This methodology is described in detail in order to provide a clear picture of the process of collecting and compiling data from a host of diverse sources.

The measurement of Gross National Product (GNP) of Pakistan is by and large based on the concepts and classification prescribed in the United Nations System of National Accounts and Supporting Tables of 1960. The estimates are prepared by a combination of product, income and expenditure methods. The Product Method is applied to compute value added in agriculture, mining and quarrying, manufacturing, construction and electricity. The Income Method is used to work out income accruing from gas transmission and distribution, water supply, sanitation, transportation, storage, communication, trade, banking & insurance, ownership of dwellings, public administration and defence and services. The Expenditure Method is employed to evaluate income from some services.

The estimates of Gross and Net National Product of Pakistan for the year 1970-71 to 1973-74 at current and constant factor cost of 1959-60 are given in Tables 1 to 4. The figures published earlier for 1972-73 have been revised on the basis of fairly firm data which became available subsequently. The estimates of value added in sectors like minor crops, livestock, small-scale industries, construction, whole-sale and retail trade and services like those for earlier years continue to be weak.

The coverage, nature and sources of data used, the methodology followed and the limitations of each sector are explained in the following paragraphs.

**AGRICULTURE:** The sector has been divided into four sub-sectors namely (i) production of crops, (ii) livestock production, (iii) fishing, and (iv) forestry.

**AGRICULTURAL CROPS** are divided into two categories—major and minor. Major crops cover rice, wheat, barley, jowar, bajra, maize, gram, rapeseed and mustard, sesamum.

cotton, sugarcane and tobacco. All other crops including fruits and vegetables are categorised as minor crops.

The district-wise production of major crops are obtained from the Ministry of Food and Agriculture, Cooperative, Works, Under-developed Areas and Land Reforms and the Provincial Departments of Agriculture. The corresponding harvest prices are obtained from the Provincial Directorates of Land Records. The district-wise gross value at current factor cost is worked out by applying these prices to relative production figures and then aggregated to arrive at the national total.

For minor crops, the sources of information for production at provincial level are the same as of major crops. However, the harvest prices are taken at 80 per cent of the wholesale prices compiled and issued by the Department of Agricultural Marketing and Grading. These data make it possible to derive gross provincial values at current factor cost.

The gross value in constant prices of both major and minor crops is derived by applying the harvest prices of each crop in the base year to the production of that crop in current year.

The gross value added in crops is computed by deducting the cost of inputs like seed, fertilizer, water, pesticides, etc. from the total value of crops. Since crop-wise use of chemical fertilizers, water and pesticides is not known, its total value is distributed on major and minor crops in the ratio of their contribution to the total value of crops.

Because of lack of data on by-products of crops, like wheat straw and rice husk, no estimate is thereof included in this sub-sector. In many cases, data on crop production is insufficient in regard to their varieties. Though price differentials for various varieties are substantial, it has not been possible to calculate separate figures for value of output of different varieties.

To account for non-reporting and under-reporting, the values of both major and minor crops are raised by 4 percent.

**LIVESTOCK PRODUCTS** cover meat, milk, eggs, fowls, animal fats, edible offal, heads and trotters, honey, wool, hair, hides & skins, bones, guts and dung. Data on livestock products are obtained from the Department of Agricultural Marketing and Grading and price data are mainly derived from the wholesale prices compiled and published by that Department. The gross value at constant prices is computed by applying the base year price to the livestock products for each year. The estimates at current prices are derived indirectly by applying the wholesale price index of livestock products to the estimates at constant prices. As inputs for livestock come almost entirely from other agricultural sub-sectors these have neither been included as output in those sub-sectors nor deducted as inputs in this sub-sector. Likewise, the value of draught power which is an input in crops sub-sector has not been included in the livestock sub-sector and no deduction is made on this account from the former. Certain items, such as salt, veterinary services and supplies, should have been debited but as relevant information is not available and these secondary inputs are assumed to be small no deduction is made for such costs.

The value added in the **FISHING** sub-sector covers commercial fishing in sea and inland water. Production and price data are obtained from the Provincial and Marine Fisheries Departments. For valuation at factor cost the wholesale prices are deflated by 10 percent to obtain an estimates of prices paid to fishermen. The gross value added is computed by deducting input at 3 percent. The estimates at constant factor cost are derived by deflating the current estimates by the wholesale price index of fish.

The gross value in the **FORESTRY** sub-sector in so far as the state forests are concerned is equivalent to the realizations at auction as reported by the Provincial Departments of Agriculture. The corresponding estimates for private forest and non-forest areas are assumed at 30 per cent of the former. To obtain gross value added a deduction of 3 percent is made for inputs. The estimates at constant factor cost are computed by deflating the current estimates by the wholesale price index of timber and fire-wood.

In the absence of any reliable information on depreciation a flat rate of 5 percent of the gross value added is applied in all the sub-sectors of agriculture to arrive at net value added.

**MINING AND QUARRYING:** This sector covers all mining and quarrying activities carried

out in the country. The estimates of value added are based on the production and price data supplied by the Fuel, Power and Natural Resources Division and the Provincial Mineral Development Departments. Gross value at constant factor cost is worked out by multiplying the annual output of each mineral by the base year pit-head or well-head prices. The estimates are current prices derived indirectly by applying the index of wholesale prices for minerals. The value of inputs is estimated at 17 percent of the total value of output. A deduction of 5 percent made on account of depreciation.

**MANUFACTURING:** This sector is divided into two sub-sectors viz., large scale manufacturing and small scale manufacturing. Large scale manufacturing covers the establishments registered under Section 2(j) of the Factories Act, 1934, while small scale manufacturing includes all such manufacturing establishments not covered thereunder.

The estimates of gross value added in the **LARGE-SCALE MANUFACTURING** sub-sector are mainly based on the Census of Manufacturing Industries 1959-60 with necessary adjustments for under coverage and miscellaneous charges like water, stationery, telephone, banking costs and Insurance premia. Estimates for other years have been obtained by applying the quantum index of manufacturing to the bench-mark value added for 1959-60. For converting the series of values added at constant factor cost into current factor cost, the wholesale price index (manufacturing group) is used. In the absence of any reliable data on depreciation, a flat rate of 10 percent of gross value added is applied to arrive at net value added.

The basic statistics available for estimating value added in the **SMALL SCALE MANUFACTURING** sub-sector are extremely weak. The estimate for the bench-mark year 1959-60 was computed on the basis of the number of persons engaged in small industries and the imputed gross value added per person. For other years, a uniform rate of 2.7 percent and from 1972-73 a rate of 2.9 percent has been used to estimate the contribution of this sub-sector to GNP. The wholesale price index (manufacturing group) has been used for converting the resulting figures at constant factor cost into current factor cost. Allowance for depreciation has been made at 5 percent to arrive at net value added.

**CONSTRUCTION:** This sector covers all construction activities including repairs, maintenance and demolition of buildings and other construction works undertaken by households, private bodies and public authorities. Owing to insufficient statistical information, its contribution to GNP is indirectly assessed on the basis of certain plausible assumptions. The main assumptions for urban area are that cost of construction is ten times the availability of cement for local consumption and that 40 percent of the total cost equals the value added. Similarly, for rural areas it has been assumed that the gross rent derived from Household Income and Expenditure Surveys constitutes 8 percent of the cost of construction and that the value added is at 50 percent thereof. This course provides the estimates for gross value added at constant factor costs, which are adjusted by the wholesales price index for manufacturing to arrive at current estimates. The value added in rural works programme is taken at 60 percent of total expenditure. A deduction at 2.5 percent for depreciation is made to work out the net value added. In the absence of sufficient data, the combined value added for urban and rural areas is based primarily on the amount relating to the availability of cement. The financial allocation of Rs. 80 million on account of reconstruction of houses damaged by the floods during the second half of 1973 has been included.

**ELECTRICITY AND GAS DISTRIBUTION SERVICES:** This sector accounts for the generation, transmission and distribution of electric energy and gas transmission and distribution. Since water and sanitary services are provided by local bodies, their value added is included in the Public Administration and Defence Sector. The estimates for electricity sub-sector are based on the data furnished by the Water and Power Development Authority (WAPDA) and the electric supply corporations and companies. The data on gas transmission and distribution are obtained from the Sui Gas Transmission Company, Karachi Gas Company, Sui Gas Northern Company and Indus Gas Company. The deflator used for obtaining estimates in constant factor costs is the wholesale price index for electricity and gas. Depreciation is worked out on the basis of provisions thereof in the budgets of the Water and Power Development Authority and the profit and loss accounts of gas and electricity companies.

**TRANSPORTATION, SHORTAGE AND COMMUNICATION:** This sector accounts for value added in railway, road, water and air transport, storage and postal, telephone and telegraph services.

For the railways, the basic data on wages, salaries, profit or loss, rent, interest and depreciation are obtained from their headquarters.

The mechanized road transport comprises buses, trucks, taxicabs, auto-rickshaws and tramways. The number of mechanized vehicles is available from the road transport authorities.

For buses, estimate of value added at current prices is computed on the basis of the number of buses and the income per bus worked out from the income and expenditure data supplied by the road transport corporations. For trucks, taxicabs and auto-rickshaws, the average number of persons employed per vehicle was worked out on the basis of data provided by the former West Pakistan Road Transport Corporation and some of the private transport organisations. The income per person in each category was worked out on the basis of data obtained from the findings of the Minimum Wage Board (1963) and the Manpower Survey (1961). For other years, adjustments in income per worker have been made according to the rate of annual increment in the wages of workers employed on buses. These two factors provided the wage bill per vehicle which was further multiplied by the number of trucks, taxicabs and auto-rickshaws reported by the Provincial Road Transport Departments. The figures of net profit are based on limited enquiries in the field. Depreciation is estimated on the basis of the life expectancies of these vehicles.

The number of persons employed in non-mechanised road transport was derived by deducting the estimated number of persons engaged in mechanised road transport from the number of persons employed in all types of road transport as reported in the Population Census Report of 1961. The employment for other years was obtained by applying the rate of population growth. The net earning per worker for the year 1961 was worked out on the basis of data of the Socio-Economic Survey of Rawalpindi and of the Department of Manpower and Employment. The earnings for other years were increased by taking into consideration the increase in the earnings of mechanized road transport workers. The net value added so arrived at has been raised by 10 per cent to arrive at gross output in this sub-sector.

For air transport, data on wages, salaries and rents are supplied by the Pakistan International Airlines Corporation. Data on profit, interest and depreciation available on an All-Pakistan basis have been allocated to the former West Pakistan in relation to its share holdings. The wages and salaries of Pakistani employees engaged by foreign airlines are obtained from their local offices.

As regards water transport, the information on wages, profits, rents and interest accruing at the port of Karachi is derived from the annual budgets of the Karachi Port Trust. The number of sea-going ships registered in Karachi and their deadweight are obtained from the Department of Shipping Control and the value added per ship is worked out from the profit and loss accounts of major shipping companies.

The value added in inland and coastal transport covers the registered vessels, launches and un-registered boats. Value added in the operation of registered craft are based on the records of the Manpower Survey and for other years the increase in the value added was made taking into consideration the increase in other types of water transport. The number of persons employed per boat was worked out on the basis of the rules framed for the port of Karachi. Their average monthly wages were taken from the records of the Manpower Survey (1961). To obtain the number of boats in subsequent years, the rate of population growth is applied. The yearly average wages are increased by the consumer price index of industrial workers. The number of passengers and cargo boats plying on Karachi coast and the number of persons employed therein were obtained from the Karachi Port Trust and the Karachi Customs authorities.

The net value added in the communication sub-sector at current factor cost consists of wages and salaries, profits, rents and interest, data of which are obtained from the Post Office Department and Telegraph and Telephone Department. As the data are available on an all Pakistan basis, the share of the former West Pakistan is estimated on the basis of the number of post offices and number of telephones. In order to get gross value added, depreciation is added to the net value added.

The corresponding figures at constant factor cost are worked by using the consumer price index industrial workers as the deflator.

**WHOLESALE AND RETAIL TRADE:** The estimates of value added in this sector consist of income of all persons engaged in distributive trades. The value added in this sector is measured through the net trade margin earned by traders on various types of products entering into the wholesale and retail trade. Trade margins were estimated through special studies undertaken for this purpose.

The quantum of agricultural products entering into trade is determined on the basis of various marketing reports and other sources. The ratios used in estimating the marketed part of rice, wheat, other food crops, cotton and other crops are 80, 40, 100 and 90 percent respectively.

The available studies on agricultural marketing show that trade margins differ from crop to crop. As a broad approximation for purposes of application of trade margins, the total agricultural produce is classified into: (i) food crops, (ii) fruits and vegetables and (iii) all other crops. The trade margins calculated from the various marketing studies came to 20 percent of food crops, 50 percent fruits and vegetables and 25 percent other crops. These margins are applied to marketed output to estimate the income arising from the marketing of agricultural crops.

The livestock products are sub-divided into milk and other products. On the basis of indirect evidence it is assumed that 22.5 percent of milk is sold in the market in fluid form. Similarly, 90 percent of other livestock products is estimated to be marketed. The overall gross trade margin on the value added in livestock products is taken to be 7 percent.

Trade margins in the case of fish and forestry products are taken at 20 percent.

In regard to trade of manufactured products the trade margins are taken at 50 percent of the value of products of large scale industries and 33 percent for products of small scale industries.

For estimating the value added in the import trade only consumer goods imported on private account are covered under the assumption that capital goods and raw materials are directly imported by the producers and goods on government account by the Government. A trade margin of 25 percent is adopted for imported consumer goods.

The trade margins obtained from the distribution of agricultural produce, manufactured and imported goods give gross value of output in the trade sector at constant factor cost. To arrive at gross value added, a deduction of 5 percent is made for inputs purchased from other sectors. A further deduction of 2 percent is made for depreciation to obtain the net value added. In order to convert the constant series into current, the consumer price index is used.

**Banking and Insurance:** The sector covers banking institutions, cooperative credit societies, cooperative banks, financial corporations and insurance companies. For want of relevant data, the present estimates of value added in this sector do not include the contribution of real estate agencies.

The estimates of value added in banking institutions at current factor costs are based on the data of wages, salaries, profits, rent and interest available from the State Bank of Pakistan. While data on wages, salaries and rent were available for the former West Pakistan, the data on profits and interest available on an all Pakistan basis was allocated to the former West Pakistan by the ratio of dividends paid to share-holders in this Wing. The value added in cooperative credit societies and banks are based on data available from the Registrars, Cooperative Societies.

The value added in financial corporations like the Pakistan Industrial Credit Investment Corporation, Investment Corporation of Pakistan, National Investment Trust, House Building Finance Corporation and Refugees Rehabilitation Finance Corporation are based on the data supplied by these agencies. The share of the former West Pakistan is derived by applying the ratio of loans sanctioned. Data relating to the People's Finance Corporation and National Development Finance Corporation have also been included here.

The value added in insurance at current factor cost comprises wages and salaries, directors' fees, commission paid to agents, profit and rent. The basic data is supplied by the Controller. Department of Insurance and the Pakistan Insurance Corporation. The data available on an

all Pakistan basis, has been allocated to the former West Pakistan by the ratio of the gross premium realized in this Wing. The value added in postal life insurance is not included here because the same is presently included in the value added in the Post Office Department.

To arrive at constant factor cost, the current estimates are deflated by the consumer price index of clerical wage-earners.

**Ownership of Dwellings:** Value added in this sector is measured by the rents accruing from the ownership of dwellings. The rental income from buildings other than dwellings originates in the sector making use of the property and as such forms a part of the value added in that sector. The bench-mark data for occupied houses in rural and urban areas are obtained from the Housing Census of 1960. The number of occupied houses for other years is estimated by applying the geometric rate of growth observed during the intercensal period of 1950-60. The gross rent data for urban and rural areas is taken from the Household Income and Expenditure Surveys conducted by the CSO (Central Statistical Office). From the gross rentals of rural areas, a deduction of 10 percent is made to allow for current repairs and maintenance. This is further deflated by 20 percent on account of depreciation. A further deduction of 10 percent is made for repairs and maintenance. The general consumer price index is used to convert constant estimates into estimates at current factor cost.

**Public Administration and Defence:** The contribution of this sector to GNP consists of wages and salaries of government employees compiled from the budgets of the Federal, Provincial and Local Governments. The wages and salaries of the employees of the Federal Government (including defence) available on an all Pakistan basis have been allocated to the former West Pakistan on the basis of location/disbursement. An imputation equal to 10 percent of the wages and salaries is made on account of the rent of government owned and occupied buildings. An upward adjustment of 5 percent is made for depreciation to convert net value added into gross value added. To convert the current into constant estimates the current series are deflated by the consumer price index (cf. Table 13).

**Services:** Income arising in this sector consists of income of persons engaged in services. In the case of the educational, medical and health services, income originating in the private sector are included. The incomes of educational, medical and health services provided by the government are included in the 'Public Administration and Defence Sector.' Income approach is used to estimate the value added in all services except launderers and barbers, whose income is estimated through the expenditure approach. The number of persons engaged in different occupations was obtained from the Population Census of 1961. The intercensal rate of growth in working force engaged in this sector was used for extrapolating the number of persons in various occupations in other years. Data on net earnings of the persons engaged in various occupations were obtained from the Manpower Survey and the available socio-economic surveys. In the case of hotel and cinema employees, it is assumed that their wages form only 50 percent of the total factor incomes originating in these establishments. The estimates at constant factor costs are adjusted with the consumer price index for converting them into current factor costs. An allowance of 5 percent is made to account for depreciation.

**Net Factor Income Payments:** Data on current flows of net factor income payments are obtained from the State Bank of Pakistan. As the data upto 1971 were available on an all Pakistan basis, the share of the former West Pakistan has been approximately taken to be 50 percent. To convert the current flows into constant factor costs, the import price index is used as the deflator.

**Population:** Population figures used for computing per capita income are those worked out by the Planning Commission.

**Private Consumption Expenditure:** The estimates of expenditure on Net National Product of Pakistan are prepared in the light of recommendations of the United Nations made in 'A System of National Accounts and Supporting Tables.'

Conceptually the flow comprises the value of final expenditure of households and private non-profit institutions on current goods and services less sales of similar goods and services. It has been derived as the residual of NNP at factor cost after making adjustment for all other flows. In actual accounting, estimates of different flows do not exactly add to NNP. Accordingly, a balancing entry—termed as statistical discrepancy—is required to be incorporated



to make the account balance. Unlike other components of expenditure on national product, private consumption expenditure is not independent estimate and as such it includes an indeterminate statistical discrepancy.

**General Government Consumption Expenditure:** The flow purports to measure the current expenditure on goods and services incurred by the Federal and Provincial Governments and local bodies as a group. It comprises compensation to employees, including pensions and purchases from enterprises and the rest of the world. A deduction is made on account of sales of goods and services other than surplus stores to enterprises and households. Sales of surplus store are treated as a decrease in government stocks.

Estimates of expenditure for each constituent of general government have been made by analysing their budgets. Within the limitations of current budgetary classification, the procedure is pretty straightforward in regard to the Federal and Provincial Governments. However, for local bodies, specially smaller ones, the budgets are difficult to obtain and the estimates, therefore, involve an element of imputation (cf. Table 16). To determine the former West Pakistan share in the Federal Government expenditure, prior to the years 1972-73 its budget for 1969-70 was classified on the basis of physical location of its various offices where possible and the ratios for the former East and West Pakistan were thus determined. However, there remained some items like external payments and expenditure of some departments, e.g., Pakistan's diplomatic missions abroad which could not be classified by location and the corresponding expenditure was allocated by the same ratios.

To work out the consumption expenditure at constant prices, the amount of compensation to employees was deflated by the consumer price index and the purchases by the general wholesale price index.

**GROSS DOMESTIC FIXED CAPITAL FORMATION:** This comprises expenditure incurred on the replacement, addition and major improvements of fixed capital, viz., land improvement, building, civil and engineering works, machinery, transport equipment and furniture and fixtures in the private and public sectors.

The fixed capital formation in the AGRICULTURE sector consists of farm machinery, implements, transport equipment, irrigation works, farm houses, barns, sheds and improvement and development of land. Included is also non-monetized fixed capital formation, i.e., capital formation which takes place through the agriculturist, his family labour, purchases of service which is paid for in kind and his own material. Conceptually the purchase price of land, net of transfer cost, is not included in the capital formation. Net increase in the livestock is theoretically of this account but in the absence of data it has not been covered in the estimates.

The investment in construction of farm buildings, barns and sheds are based on the Rural Construction Survey for the years 1959-60 to 1963-64 conducted by the CSO. These estimates have been projected by straight line method using 1963-64 data as bench-mark.

The investment in transport equipment in this sector covers bullock carts only. These estimates are based on a survey on non-mechanized transport conducted by CSO which gives the number of bullock carts operating in rural and urban areas. It is assumed that 20 percent of these are built every year to replace the existing stock resulting in no change in the total as given in the Survey. For valuation purposes, the price per cart was assumed to be Rs. 300 in the base year which is adjusted by the wholesale price index to arrive at the current price.

The investment in agricultural machinery and implements has been estimated through commodity flow method, i.e., by taking account of imports, exports and domestic production of such goods. Figures of imports and exports are available from trade statistics compiled by Statistical Division. For estimating domestic production, the data of Census of Manufacturing Industries for the years 1965-66 and 1967-68 and Survey of Small Scale Industries in urban areas of former West Pakistan for 1961 were used. The estimates for other years were made by using industrial production growth rate of agricultural machinery in the former case and population rate in the latter. These estimates were further adjusted by the wholesale price index of machinery to arrive at current value of production. Trade mark-up of 25 percent covering trade and transport margins were applied on the current value. The investment in tubewells is based on the information received from the respective Provincial Departments.

The estimates of non-monetized investment are based on special studies carried out by various

research workers. Bench-mark data was available for 1965-66 which has been used for estimation.

The estimates for the agriculture sector are under-estimated to the extent that these do not include the value of private monetized investment in land improvement, irrigation works, etc.

The fixed capital formation in the MINING AND QUARRYING sector consists of expenditure made by private and public establishments on land improvement, construction works, transport, machinery and equipment. The expenditure on exploration, except those on durable structures such as wells and mine shafts, is not included in capital formation.

The estimates of the private sector for 1969-70 have been developed on the basis of data obtained through inquiries on mining and quarrying establishments conducted by the CSO. In the absence of any information for the subsequent years the figures of 1969-70 have been repeated. The data on fixed capital formation in the public sector is collected from the WPIDC (West Pakistan Industrial Development Corporation) and other autonomous and semi-autonomous organizations.

The estimates for the LARGE-SCALE MANUFACTURING sub-sector are prepared separately for establishments in production and those under construction. The detailed estimates of this sub-sector by industry and type of assets are given in Tables 18 and 19. The totals of these tables will not tally with those given in Table 17. The former two tables include the total cost of land and residential buildings while the latter one includes only 10 per cent of the cost of land as improvement charges and the investment in residential buildings is shown under ownership of dwellings.

To prepare the estimates for establishments in production sample surveys are conducted to collect the data on gross fixed capital formation in private establishments. The frame of the Quarterly Survey of Industrial Production is used for this purpose.

The estimates for manufacturing units under construction are based on the investment sanctioned by the Department of Investment Promotion and Supplies, IDBP and PICIC.

The data on gross fixed capital formation in respect of establishments falling under the public sector are fully covered.

No comprehensive source is available to provide data on fixed capital formation in the SMALL SCALE INDUSTRIES sub-sector excepting such indicators as could be developed by using the Karachi Small Industries Survey, 1966. Following those, the estimates were made on the basis of the number of persons engaged in small industries and the yearly average investment per worker in each industry. For other years the investment estimates were projected on the basis of population growth rate. To put these estimates in current prices a consumer price index was used (cf. Tables 20 and 21).

All expenditure on fixed assets incurred by the Small Industries Corporations was treated as a public investment in small scale industries.

The fixed capital formation in the CONSTRUCTION sector consists of machinery and transport equipment. The estimates for this sector have been prepared through the commodity flow method as used for the agriculture sector. The value of buildings used in this sector is assumed to be nominal and has not been taken into account.

The fixed capital formation in the ELECTRICITY and GAS sector consists of fixed assets used for the generation, transmission and distribution of electric energy, and the purification, transmission and distribution of natural gas.

The data on capital formation for private companies and autonomous bodies engaged in the generation of electricity and gas were collected through direct inquiries.

Estimates of capital formation in TRANSPORT AND COMMUNICATION have been prepared separately for the private and public sectors. Under the private sector this includes land and water transport. The estimates are prepared from the trade and domestic production data. The procedure adopted for estimation is the same as explained under the agriculture sector. Estimates for Railway is based on the annual budgets, whereas for the Post Office Department and the Telegraph and Telephone Department the same are reported by the departments. The expenditures of these organizations are shown under government enterprises. Investment data as reported by Pakistan International Airlines Corporation and National Shipping Corporation are included under 'Other Autonomous Organizations'.

The capital information in **BANKING, INSURANCE AND FINANCIAL INSTITUTIONS** cover the expenditure on fixed assets of the State Bank of Pakistan, the National Bank of Pakistan, other commercial banks, cooperative banks, insurance companies, the Agricultural Development Bank, the Industrial Development Bank, the Pakistan Industrial Credit and Investment Corporation, the House Building Finance Corporation, the Investment Corporation of Pakistan, the National Investment Trust and the Pakistan Insurance Corporation. The data is collected through the yearly questionnaire on fixed capital formation. As investment is not reported by some Constituents, the reported investment is increased by the ratio of the paid-up capital of the reporting units to the total paid-up capital of the section.

The sector on **DWELLINGS** covers expenditure on construction of new residential structures and major additions and alterations of old structures. The investment estimates of private residential constructions are made separately for rural and urban areas. The rural construction survey conducted by the CSO provided the value of investment in dwellings for the years 1959-60 to 1963-64. The estimates for other years were made by assuming a direct relationship between the increase in the number of dwellings and the number of households. Estimation of expenditure on urban housing construction is based on the census reports of 1951 and 1961. Growth of urban population, average number of persons per household, number of households per dwelling and number of houses available were estimated for different years. The number of houses estimated was multiplied by the average cost of urban dwellings available through various reports. An allowance of 1% was made for replacement, alterations and additions of the total stock of urban dwellings in the previous years. The resultant figures were adjusted with the construction index.

The **SERVICES** sector includes fixed capital expenditure on construction of buildings under the private sector made by educational services, research and scientific institutions, medical and other health services, welfare, institutions, business, professional and labour organisations, religious institutions, recreational and cultural services, including motion pictures, personal and household services like laundries, barber shops and trading establishments both in urban and rural areas. The investment in non-residential buildings in rural areas was available from the rural construction survey for 1963-64.

The base year data is increased with the compound growth rate of population to arrive at the investment for the years 1970-71 to 1972-73. This investment is adjusted with the cost of living index to bring it into relation with current prices. The investment estimates for urban areas are based on the Housing Census of 1960. The number of structures was raised with compound growth rate of population and 20,000 rupees as the average cost of a unit was used to estimate investment for different years. The estimate of investments was adjusted with the construction index to arrive at the expenditure at current prices.

Expenditure on capital items by the Federal, Provincial and Local Government is based on the classification of their budgets.

**CHANGE IN STOCKS:** This refers to the value of physical change in raw material work in progress and finished goods held by enterprises and government stockpiles. The basic information received from the Planning Commission related to all Pakistan. The ratio of fixed capital formation in the former East Pakistan for 1969-70 was used for estimating the share of the former West Pakistan for the years 1970-71 and 1971-72. The changes in stock in current prices are deflated by the general wholesale price index to bring the same in constant prices.

**EXPORTS AND IMPORTS OF GOODS AND SERVICES:** This represents the value of goods and services sold to and purchased from the rest of the world. It includes gifts in cash or kind but excludes military equipment transferred between the governments. The figures of exports and imports of goods are secured from the Statistical Division while those for services are derived from the balance of payment statistics compiled by the State Bank of Pakistan. As the figures for the years prior to 1972-73 of services are not available separately for the former West Pakistan, the ratio arrived at by the imports and exports of goods, which is a major component in the total, is applied to work out the share of the former West Pakistan. Imports are deflated by the import price index and exports by the export price index to bring the same to constant prices.

**INDIRECT TAXES AND SUBSIDIES:** Indirect taxes comprise those taxes paid by enterprises which are chargeable as business expense and taxes paid by the households on possession and on the use of goods and services without regard to personal circumstances. Subsidies consist of current grants made by government to producers and are in effect negative indirect taxes since they contribute to the factor income but do not enter into market prices. They may take the form of direct payments to producers or of a differential between the buying and selling prices of government trading organisations.

Figures of indirect taxes and subsidies have been derived from budgets of the Federal, Provincial and Local Governments. The budgets of the Federal Government for the years prior to 1972-73 do not provide information by the former East and West Pakistan. As such, the data on central excise duty, sales tax and customs duty realized from the former West Pakistan was obtained from the Central Board of Revenue. Former West Pakistan figures for other indirect taxes, i.e., stamp duty and surcharge on cement and petroleum etc. were not available. These were, therefore, estimated on the basis of the share of the former West Pakistan in the total of excise duty, sales tax and customs duty which were the major components of the total. The expenditure on subsidies of the Federal Government was classified on location basis. The subsidies on PIA, loss on coinage and other miscellaneous items were taken as 50 per cent of the total for the former West Pakistan. The subsidies on fertiliser were allocated 74 per cent to West Pakistan on the basis of its share in the total as used by the Planning Commission. The estimates in current prices were deflated by the general wholesale prices index to bring the same at constant prices.

**PROVISION FOR FIXED CAPITAL CONSUMPTION :** This represents the sum total of the estimates of provision on account of capital consumption which is also commonly known as depreciation for capital goods having rendered production in the entire economy.

It would appear from the preceding paragraphs (10 to 24) that the Statistical Division are making valiant attempts to provide a fairly reasonable estimation of national income in the light of available resources. Suggestions for improving the coverage and quality of statistics would require a separate study in itself. It should, however, be stressed that the estimation of the contribution of the agricultural sector to the national income could do with a lot of much needed improvement and change in its organizational structure. The Statistical Division should have a more direct and a more intensive say in the collection and compilation of agricultural statistics and here the public money so spent would have been well spent.

National income statistics in Pakistan share the disabilities experienced by all developing countries. The most significant drawback arises from the existence of non-monetised transactions. Agriculture covers a substantial amount of subsistence farming in which most of the output is consumed in the farm itself and does not come into the market at all. Again, ignorance and lack of education prevent the maintenance of regular accounts and it becomes difficult to obtain accurate estimates of value added. It also becomes difficult to obtain correct estimates of income in cases where people undertake more than one occupation, as is the case of agriculturists' workers who take on other manual work during the slack season. Lastly, there is a general shortage of the availability of accurate data in some of the sectors of the national economy. Nevertheless, it must be stressed that some developing countries like Pakistan have made satisfactory progress in the statistical field. Of course, in this field there is hardly any room for complacency.

## **National income of Pakistan**

A glance at the aggregate and per capita gross national product at constant factor cost of 1959-60 provides interesting reading. In Table 24.1 one would find all these figures as also the actual value of the contribution of each of the sectors to the GNP at 1959-60 factor cost.

TABLE 24.1

*Gross National Product at Constant Factor Cost*

(Base; 1959-60=100)

(Million Rupees)

S. No.	Sectors	1959-60	1964-65	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
1.	Agriculture ... ..	7,711	9,276	12,574	12,188	12,611	12,821	12,922	12,737
	Major crops ... ..	3,882	4,888	7,533	7,045	7,336	7,473	7,541	7,155
	Minor crops ... ..	893	1,130	1,363	1,418	1,507	1,478	1,523	1,576
	Livestock ... ..	2,837	3,121	3,440	3,509	3,579	3,651	3,724	3,799
	Fishing ... ..	71	91	170	155	125	128	115	118
	Forestry ... ..	28	46	48	61	64	91	89	89
2.	Mining & Quarrying	70	122	157	156	159	159	180	199
3.	Manufacturing	2,018	3,501	5,156	5,234	4,988	5,474	5,831	6,006
	Large-scale ... ..	1,159	2,523	4,042	4,090	3,813	4,265	4,585	4,723
	Small-scale ... ..	859	978	1,114	1,144	1,170	1,209	1,246	1,283
4.	Construction ... ..	427	1,029	1,357	1,390	1,175	1,346	1,246	1,283
5.	Electricity and Gas								
	Distribution Services	87	172	639	741	780	903	1,068	1,125
6.	Transport, Storage and								
	Communications ... ..	921	1,490	2,022	1,974	2,015	2,371	2,456	2,635
7.	Wholesale and Retail								
	Trade ... ..	2,105	3,166	4,457	4,453	4,414	4,692	5,377	5,472
8.	Banking and Insurance			579	635	640	807	879	903
9.	Ownership of Dwellings	837	976	1,112	1,149	1,188	1,231	1,275	1,321
10.	Public Admn. and								
	Defence ... ..	397	543	2,080	2,133	2,278	2,677	2,327	2,559
11.	Services ... ..	1,411	1,722	2,169	2,276	2,391	2,516	2,653	2,803
12.	Gross Domestic								
	Product ... ..	15,984	22,007	32,302	32,627	32,925	34,997	36,528	37,474
13.	Net Factor Income								
	Payment ... ..					+ 71	+ 181	+ 184	+ 204
14.	Gross National Product	15,984	22,007	32,302	32,329	32,698	35,178	36,712	37,678
15.	Population (millions)	45	52	60	61	63	65	67	69
16.	Per Capita Gross								
	Income (Rupees) ...	355	425	541	526	515	535	544	541

Source : Statistical Division and Planning Commission.

Table 24.2 indicates the percentage of the sectors and sub-sectors to GNP at constant factor cost of 1959-60.

TABLE 24.2

*Shares of Sectors in Gross National Product at Constant Factor Cost of 1959-60*

(Percentage)

S. No.	Sectors	1959-60	1964-65	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
1.	Agriculture	48.2	42.2	38.9	37.7	38.6	36.5	35.4	33.8
	Major Crops ...	24.3	22.2	23.5	21.8	22.5	21.2	20.5	19.0
	Minor Crops ...	5.6	5.2	4.2	4.4	4.6	4.2	4.1	4.2
	Livestock .. ..	17.7	14.2	10.6	10.1	10.9	10.4	10.1	10.1
	Fishing ... ..	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.3
	Forestry ... ..	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.2
2.	Mining and Quarrying	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5
3.	Manufacturing	12.6	15.9	16.0	16.2	15.3	15.5	15.9	15.9
	Large-scale ...	7.3	11.5	12.5	12.7	11.7	12.1	12.5	12.5
	Small-scale ...	5.3	4.4	3.5	3.5	3.6	3.4	3.4	3.4
4.	Construction ... ..	2.7	4.7	4.2	4.3	3.6	3.8	4.1	4.5
5.	Electricity and Gas								
	Distribution Services	0.5	0.8	2.0	2.3	2.4	2.6	2.9	3.0
6.	Transport, Storage								
	and Communications	5.8	6.8	6.2	6.1	6.2	6.7	6.7	7.0

7. Wholesale and Retail Trade .. ..	13.2	14.4	13.8	13.8	13.5	13.3	14.6	14.5
8. Banking and Insurance	—	—	1.8	2.1	1.2	2.3	2.4	2.4
9. Ownership of Dwellings .. ..	5.2	4.4	3.4	3.5	3.6	3.5	3.5	3.5
10. Public Admn. and Defence .. ..	2.4	2.5	6.4	6.6	7.0	7.6	6.3	6.8
11. Services .. ..	8.8	7.8	6.7	7.0	7.3	7.2	7.2	7.4
12. Gross Domestic Product	100.0	100.0	100.0	100.0	99.8	99.5	99.5	99.5
13. Net Factor Income Payment .. ..	N.A.	N.A.	N.A.	N.A.	0.2	0.5	0.5	0.5
14. Gross National Product	N.A.	N.A.	N.A.	N.A.	100.0	100.0	100.0	100.0

Table 24.3 indicates gross domestic product at current factor cost. A comparison of these figures with those in Table 24.1 would indicate the increase in factor costs in the years under comparison. It should be noted that in Table 24.3 we are dealing with gross domestic products at current factor cost and not with gross national product at current factor cost as the effects of foreign trade (export earnings minus import expenditure) have not been covered here.

**TABLE 24.3**  
*Gross Domestic Product at Current Factor Cost*

S. No.	Sectors	1959-60	1964-65	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75 (Prov)
1.	Agriculture	7711	10438	15964	16236	17934	21907	28798	32734
	Major Crops .. ..	3882	5720	9103	8832	10067	12346	15316	17623
	Minor Crops .. ..	893	1346	1999	2244	2408	2833	3696	4568
	Livestock .. ..	2837	3199	4547	4794	5053	6169	8247	9616
	Fishing .. ..	71	127	233	261	295	379	476	565
	Forestry .. ..	28	46	82	105	111	180	253	362
2.	Mining and Quarrying ..	70	140	229	243	268	386	560	769
3.	Manufacturing .. ..	2018	3759	6923	7450	7557	9348	12187	16643
	Large-scale .. ..	1159	2704	5427	5832	5777	7282	9583	13088
	Small-scale .. ..	859	1055	1496	1628	1780	2066	2604	3555
4.	Construction .. ..	427	1103	1822	1979	1763	2298	3114	3750
5.	Electricity and Gas Distribution Services ..	87	200	661	782	823	955	1217	1340
6.	Transportation, Storage and Communications ..	921	1737	2937	3004	3233	4260	5565	7200
7.	Wholesale and Retail Trade .. ..	2105	3690	6475	6781	7985	7490	12183	14947
8.	Banking and Insurance	—	—	771	882	968	1408	1801	2231
9.	Ownership of Dwellings	837	1083	1614	1752	1913	2237	2868	3588
10.	Public Administration and Defence .. ..	397	615	2769	2967	3445	4430	5140	6816
11.	Services .. ..	1411	1926	3134	3475	3894	4636	6363	8102
12.	Gross Domestic Product	15984	24691	43299	45547	48883	60355	78986	99120
13.	Population .. ..	45	52	60	61	63	65	67	69
14.	Per Capita Gross Income (Rupees) .. ..	355	477	725	741	772	925	1175	1432

*Source : Statistical Division.*

Table 24.4 indicates the expenditure on the National Product by the various sectors in 1969-70 and in 1974-75. The percentage contribution of each sector is also given. The estimates are based on prices prevailing in the years under review.

TABLE 24.4

*Expenditure on National Product at Current Prices*

(Million Rupees)

Flows	1969-70	Percentage	1974-75 (Prov)	Percentage
1. Private Consumption Expenditure ..	36642	84.6	89620	89.6
2. General Government Current Consumption Expenditure ..	4846	11.2	12100	12.1
3. Gross Domestic Fixed Capital Formation ..	6814	15.7	16500	16.5
4. Change in Stocks ..	706	1.6	2000	2.0
5. Export of Goods and Services ..	3637	8.4	12450	12.5
6. Import of Goods and Services ..	(—) 4942	(—) 11.4	(—) 26250	(—) 26.2
7. Expenditure on Gross Domestic Product at Market Prices ..	47703		106420	
8. Net Factor Income from/to rest of the world ..	(+) 3	—	(+) 897	0.9
9. Expenditure on Gross National Product at Market Prices ..	47706		107317	
10. Indirect Taxes ..	(—) 4636	(—) 10.7	(—) 10656	(—) 10.7
11. Subsidies ..	(+) 232	0.5	(+) 3356	3.4
12. Gross National Product at Factor Cost ..	43302	100.0	100017	100.0

*Source: Statistical Division.*

Tables 24.1 to 24.4 provide reasonably sufficient information to analyse National Income estimates for Pakistan. The significance and use of these estimates is discussed in the following section.

### Significance of national income estimates

Statistics, particularly those relating to National Income, can be very revealing. They are extremely useful to policy-makers as also those who take an intelligent interest in national and international affairs.

National Income estimates at constant factor cost indicate the per capita growth in National Income and are a ready reckoner of the progress made over the years. The following Table indicates the trends in population, gross national product and per capita income of Pakistan at constant factor cost of 1959-60.

TABLE 24.5

Year	Gross National Product (Million Rs.)	Population (in million)	Per Capita Gross Income (in Rupees)
1949-50 .. .. .	12,610	35.8	351
1954-55 .. .. .	14,651	40.2	365
1959-60 .. .. .	15,984	45	355
1964-65 .. .. .	22,007	52	425

1969-70 .. .. .	32,302	60	541
1970-71 .. .. .	32,329	61	526
1971-72 .. .. .	32,698	63	515
1972-73 .. .. .	35,106	65	535
1973-74 .. .. .	36,712	67	544
1974-75 .. .. .	37,678	69	541

*Source:* Statistical Division and Planning Commission.

Table 24.6 indicates that per capita annual income in Pakistan at constant prices of 1959-60 increased from 301 rupees in 1949-50 to 552 rupees in 1969-70 and has since then remained stagnant upto mid-1975.

Gross National Product estimates over a period of years present a summary description of changes in the size and composition of domestic production.

Gross domestic production (at constant factor cost of 1959-60) increased from 15,984 million rupees in 1959-60 to 32,302 million rupees in 1969-70 and then to 37,462 million rupees in 1974-75.

The share of agriculture declined from 48.2 percent in 1959-60 to 38.9 percent in 1969-70, and then to 33.8 percent in 1974-75. The share of the manufacturing sector in these three years was 12.6 percent, 16 percent and 15.9 percent respectively.

Now taking the gross domestic product at market prices the figures for these three years were 15,984 million rupees, 43,299 million rupees and 99,120 million rupees, which in per capita per annum terms amount to 355 rupees, 725 rupees, and 1,432 rupees. According to per capita GNP at constant factor cost our per capita income is stagnant in 1974-75 as compared to 1969-70 but per capita income at market prices gives an illusion of a substantial increase.

It is interesting that a comparison of the growth rates of India and Pakistan in terms of real products shows a relatively healthier trend in the case of Pakistan.

**TABLE 24.6**

*Growth rates of real Products 1965—74  
(Percent)*

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
India (based on GDP of 1960-61) ..	1.6	4.5	1.5	8.8	3.6	5.5	4.7	1.5	0.5	3.1
Pakistan (based on GDP of 1959-60) ..	8.2	4.9	4.2	7.7	6.4	17.1	0.1	0.9	7.3	6.2

*Source:* ADB: Key Indicators.

It would be observed that in 1971 when the mismanagement of the Economy by Gen. Yahya Khan reached its peak, the growth rate of real products sank to an all-time low of 0.1 percent.

Estimates of per capita income and the average annual growth rates over a period of time provide valuable information in respect of various regions and different countries. The World Bank has prepared estimates of gross national product per capita in 1970 and the average annual growth rate of 1960-70. These are reproduced as follows and provide a most interesting base for comparing the relative prosperity of peoples in the form of per capita incomes and the intensity of the measures that are being taken to accelerate their economic growth.



TABLE 24.7

*Gross National Product Per Capita in 1970 and Average Annual Growth Rates*

Name of Country or Region	GNP per capita (U.S. Dollars)	Growth Rate percent per annum during 1969-70
Africa .. .. .	200	2.2
Egypt .. .. .	210	1.7
Central and South America .. .. .	560	4.3
North America .. .. .	4,660	3.4
Burma .. .. .	80	0.6
People's Republic of China .. .. .	160	2.1
India .. .. .	110	1.2
Indonesia .. .. .	80	1.0
Iran .. .. .	380	5.4
Israel .. .. .	1,960	4.7
Malaysia .. .. .	380	3.1
Nepal .. .. .	80	0.5
Pakistan .. .. .	153	7.6
Philippines .. .. .	210	2.9
Saudi Arabia .. .. .	440	8.0
Sri Lanka .. .. .	110	1.5
Thailand .. .. .	200	4.9
Japan .. .. .	1,920	9.6
Europe less USSR .. .. .	1,950	4.0
Turkey .. .. .	310	3.9
USSR .. .. .	1,790	6.8
Australia .. .. .	2,820	4.2
New Zealand .. .. .	2,700	3.1

*Source:* World Bank Trend. For Pakistan the figures relate to GDP at current factor cost from Pakistan Economic Survey for 1974-75.

National Income estimates indicate the distribution amongst the various social groups (wages for labour, and rent, interest and profit for the upper income groups). This can provide a basis for a rational policy for redistribution of incomes; in developing countries an attempt to solve the problem radically generally results in the greater sharing of poverty.

National Income estimates can be an effective guide for channelling external assistance, particularly by international institutions. For instance, the International Development Association (IDA) has generally limited its lending to the poorest of its member countries whose per capita GNP is below the level of \$375 per annum. The aid-giving agencies are also in a position to advise on the adjustments that may be required in the components of the GNP to make the economy of the recipient country more viable.

Estimates of national expenditure are equally illuminating as they provide valuable information relating to private consumption, government's current consumption, capital formation, export and import of goods and services, indirect taxes and subsidies.

Table 25.5 which compares 'Expenditure on National Product at current prices' indicates that comparing 1969-70 with 1974-75, private consumption increased from 84.6 percent to 89.6 percent of total gross national product at factor cost, governments' current consumption expenditure from 11.2 percent to 12.1 percent, gross domestic fixed capital formation from 15.7 percent to 16.5 percent, change in stocks from 1.6 percent to 2 percent, impact of foreign trade from 3 percent to 13.7 percent, and subsidies from 0.5 percent to 3.4 percent.

It is apparent that the increase in consumption in money terms in the public and private sectors has been at the expense of capital formation and was occasioned by the pronounced inflationary trend. An analysis of gross national expenditure can make for a viable investment savings and consumption policy.

An international comparison of the expenditure shares of the gross domestic product can provide interesting data for comparing the shares of private consumption, government consumption, gross capital formation and net exports in various countries.

**TABLE 24.8**  
*Expenditure Shares of GDP: 1965, 1970 and 1974*  
*(In Percentage)*

DMC	Private Consumption			Government Consumption			Gross Capital Formation			Net Exports and Statistical Discrepancy		
	1965	1970	1974	1965	1970	1974	1965	1970	1974	1965	1970	1974
Indonesia	82.8	79.5	23.6	6.7	8.6	10.0	8.4	12.2	16.5	2.1	0.3	0.1
Malaysia	64.2	61.5	61.2	17.3	17.7	20.5	15.4	17.8	22.4	3.1	3.0	4.1
Pakistan	—	76.8	75.0	—	10.3	11.0	—	14.6	13.0	—	1.7	1.0
Philippines	78.9	74.2	71.8	9.9	8.3	8.7	21.2	19.9	22.6	10.0	2.4	3.1
Sri Lanka	72.7	69.3	72.9	14.3	12.9	12.2	13.3	20.0	15.7	0.3	2.2	0.8

*Source : Asian Development Bank "Key Indicators"*

National income statistics are invaluable in formulating a viable commercial policy relating to exports and imports in order to avoid running into serious and chronic balance of payment difficulties.

These statistics reveal the basic essentials of a country's income, its strength and its weaknesses. They provide an apt instrument for measuring past performance. They make international comparisons relatively simpler and can be a powerful instrument in rousing the national and international conscience for taking concerted action for the accelerated development of the poorer areas of the world. They can be a good indicator of the efficacy of external assistance. They are critical in the sense that they not only provide for a diagnosis of the economic and social malaise of the country but also firmly indicate the line of action that is to be taken to move towards eradicating the malaise.

# International Trade and Aid

## Origin, nature and importance of Trade

Trade in the simplest possible language means an exchange of goods and/or service between two juristic persons each of whom is under the impression that he is better off as a result of that exchange. Each of the two persons involved makes a notional gain in terms of added utility as a result of this exchange.

Man at the earliest stage of economic development was self-sufficient and completely self-reliant. As he advanced in terms of what we call civilization and as his wants increased, he soon discovered that he could enjoy a more meaningful and a more satisfying life if he specialized in the production of certain goods and services and exchange his surpluses with those who were producing other goods and services which he thought he needed. Thus trade had its origin in the economic and social advancement of mankind and it led to the division of labour and specialization. People became less and less self-sufficient, and indeed a time came when even sovereign independent nations lost their self-sufficiency.

Human beings living in far-flung regions of the world became inter-dependent and humanity moved closer to the concept of One World. Self-reliance was no longer an attainable ideal when considered in the content of self-sufficiency in all types of goods and services. Today no nation can exist in an economic vacuum and its industries, commerce, technology and all other facets of the economy are very closely related to the economics of other countries through a complex network of freight and international capital movements.

The **barter system** had been a successful forerunner of modern trade. In the absence of money the exchange of one commodity or service with another was undertaken directly without using a medium of exchange. With the evolution of money the barter system was phased out as it suffered from some inherent deficiencies, the more important of which were the necessity of a double coincidence of wants, a general lack of means of sub-division, and the absence of an independent measure of value. Although barter is usually associated with primitive man and the pranks of small boys and girls, even today we have quite a few international trade arrangements on a barter basis. It is, however, emphasised that all such cases involve an evaluation of the goods and services exchanged; in other words money is involved.

The distinction between **domestic trade** and **foreign trade** is not based on any objective economic criteria. It is basically a value judgement or a rule of law. Domestic trade implies trade within an area which is subject to the jurisdiction of a particular Government. The line of demarcation between the two kinds of trade relates to national boundaries and foreign trade covers all goods and services which enter or leave national frontiers.

There are certain marked differences between domestic trade foreign trade, which can be summed up as follows:—

- i) Labour and capital can be quite mobile within a country but as between different countries they are rather immobile. Adam Smith very wisely remarked that of all sorts of luggage man is the most difficult to be transported.
- ii) The existence of different monetary units, with varying intensity of exchange control, prevent the free movement of goods and services, and to that extent international trade is more restricted as compared to domestic trade.
- iii) The existence of sovereign independent States, each pursuing its policies with reference to its more immediate interests, and as also legal, fiscal and banking restrictions are more frustrating for foreign trade as compared to their impact on domestic trade.
- iv) The cultural and social diversities between various markets are more intense in the case of foreign trade vis-a-vis those affecting domestic trade. Not only do the standards

of goods and services differ but in some cases the standard specifications also vary. This makes for a serious difficulty in the promotion of international trade.

- v) The emergence of economic nationalism which has invariably attracted the attention of all those who take over the reins of government either for the first time or after a long time is a major cause retarding the growth of international trade. It does however, encourage the development of domestic trade.

When we speak of a nation trading in various goods and services, it should be remembered that while governments play a major role in foreign trade in varying degrees, the decision taken regarding quantity, composition and direction of foreign trade are taken by individuals and business firms. Some make a profit by selling goods abroad while others do so in buying goods and selling them in the domestic market. While domestic trade can flourish through the medium of the national currency, foreign trade can only be possible if the currency of one nation can be exchanged for that of another.

The development of intra-regional trade (within the same region) and inter-regional (between different regions), and multilateral international trade is an effective as well as a virtuous path leading to progress and development.

### ADVANTAGES

The advantages of international trade are:

- (i) The principle of division of labour is applied internationally and the existence of foreign trade enables greater specialisation in the reduction of those goods and services in which the countries concerned enjoy greater relative advantages. This increases the total availability of goods and services in the world and it is conducive to human welfare.
- ii) Foreign trade enables people to buy goods and services of the quality they desire at the cheapest available price. The whole world becomes their shopping centre.
- iii) When natural calamities such as floods, earthquakes and drought hit a country, the existence of foreign trade provides much needed solace and prevents human misery and deprivation.
- iv) Foreign competition and the fear of imported goods and services replacing domestic production acts as a powerful deterrent to unhealthy and restrictive business practices and makes for more efficient domestic production.
- v) The existence of foreign trade enables the growth of complementary economies to the advantage of everybody concerned. Consumer goods, capital equipment, industrial raw materials and spare parts, and critical items, such as food, can be secured from outside the national borders and thus add to the welfare of the importing country.

It has been said that foreign trade is not an unmixed blessing and that while it adds to national welfare it also suffers from severe drawbacks. The **disadvantages of foreign trade** are more imaginary than real and largely follow from feelings of perverse nationalism and a narrow **parochial** outlook on life. The criticism of foreign trade can be summed up as follows:—

- i) Foreign trade may lead to the depletion and ultimate exhaustion of essential natural resources, such as minerals, which cannot be replaced.
- ii) Foreign trade exposes domestic industry to foreign competition and can even lead to the dumping of foreign goods and services much to the detriment of the domestic economy. Dumping is said to occur when goods are supplied to the importing country at a price which is either lower than the cost of production or lower than the price at which similar goods are distributed in the domestic market.
- iii) Foreign trade may adversely affect the pattern of domestic consumption and may lead to damaging the national culture. Import of alcohol, drugs and cabaret artistes would fall into this category.
- iv) The existence of foreign trade leads to specialisation and this perforce makes the economy of the country dependent on a smaller range of economic activity.

- v) Foreign trade makes a country totally dependent upon other countries; this can be a serious matter in times of emergency, such as wars. This argument is used widely when pleading the cause for greater defence production within the country itself. As stated earlier, the genesis of this criticism relating to national self-sufficiency can be traced to a limited and narrow approach to life. It is sometime forgotten that wars have been lost because some obscure and relatively meaningless items like nails and screws were not available to service the war machine.

Surely no country can dream of becoming totally self-reliant. The greater the specialization on the basis of comparative advantage, the greater the national welfare and human progress. In any case wars today require colossal resources which only a few countries or a few groups of countries can afford. For instance Egypt is spending \$ 3 billion per annum in 1975 just to keep up a measure of war preparedness. In terms of nuclear warfare it is far harder to conceive of even the super-powers going to war with one another. Peace and progress are indivisible, and it would be a good thing were foreign trade planned and oriented on the basis of peace and progress.

### Gains from Trade, Theory of Comparative Cost

The classical theory is up until now the only systematic theory of international trade and it was worked out by earlier writers such as Adam Smith and Ricardo. It is based on the doctrine of comparative costs, and on the principle that prices, exchange rates, and the international flow of money provide a mechanism which not only links the monetary systems of the world but also ensures that the balance of payments are automatically adjusted.

Haberler has rightly stressed the relationship between the theory of international trade and general economic theory. He says:

"The theory of international trade has to be regarded as a particular application of general economic theory. The theory of marginal utility, which interprets and explains the individual's economic activity as such, must therefore, be applicable to those economic activities, which in their totality, constitute international trade. The same holds true also of the propositions of price theory which follow from the laws of supply and demand."

The theory of comparative costs traces the gains from international trade to the existence of the relative advantage enjoyed by one country or more in the production of a particular good or service. Let us take the example of two groups of countries (A and B) producing wheat and sugarcane. In the 'A' group, the marginal cost of producing wheat is 2 rupees a pound and that of sugarcane 4 rupees per pound. In the 'B' group the marginal cost of producing wheat is one rupee per pound and that of sugarcane 3 rupees per pound.

The 'B' group can produce both wheat and sugarcane at a cheaper price, but the comparative advantage is higher in the production of wheat rather than sugarcane. The disadvantage of the 'A' group vis-a-vis the 'B' group is lower in the case of sugarcane rather than wheat. It would pay the 'A' group to specialise in the production of sugarcane and for the 'B' group to concentrate on wheat. The doctrine of comparative costs can be better appreciated with reference to the concept of opportunity cost.

**Opportunity cost** relates to measuring the cost of anything in terms of the most desirable foregone alternative. The opportunity cost of a cinema ticket is the amount of satisfaction that could have been obtained had the money been spent on buying the next best thing, say, a couple of pounds of mangoes. In our illustration of the 'A' and 'B' groups producing wheat and sugarcane, the opportunity cost of 'A' group for sugarcane is 4:2 rupees or two rupees, while the opportunity cost of 'B' group for wheat is 1:3 or  $\frac{1}{3}$  of a rupee.

As a general principle, under perfect competition the opportunity cost of X in terms of Y = marginal cost of production of X ÷ marginal cost of production of Y, or money price of X ÷ money price of Y. It should be emphasised that the theory of comparative costs refers only to average cost. If every wheat farm and every sugarcane farm in 'B' group has a lower cost as compared to every such farm in 'A' group, and there is a free flow of trade, then there will be no wheat and sugarcane production in 'A' group, and there is a free flow of trade, then there will be no wheat and sugarcane production in 'A' group farms. There must, however, be some

farms in the 'A' group whose costs are lower than those of some farms of wheat and sugarcane in group 'B'. Hence some wheat will be grown in group 'A' and some sugarcane in group 'B'.

It is clear that gains from trade depend on the existence of differing relative costs. A country has a comparative advantage with reference to another country in the production of those goods in which it has a lower opportunity cost than the other country. Division of labour or specialisation according to the degree of comparative advantage makes it possible to produce more of all goods. If the two groups of countries are producing some of all types of goods, it is possible by reallocating resources to produce more of all types of goods.

In assessing comparative costs care should be taken to include transportation and other transfer costs. They include loading costs, freight charges, and unloading costs. Freight rates account for almost 10 to 20 per cent of the value of goods entering international trade. Other service factors which inhibit the operation of the doctrine of comparative costs include tariff barriers (import and export duties), quotas and exchange restrictions. Innovations and technological advances also make it rather difficult to keep up with changing comparative costs.

It should, however be emphasised that the theory of comparative costs still remains the main pillar of the theory of international trade although transportation costs do influence not only international trade but also the location of production. The cost of transporting the inputs of production and the cost of transporting the output to the ultimate consumer is a major factor in determining the location of production. Locations near raw material sources are called resource-oriented, while those near the major markets of the output are referred to as market-oriented. The determination of location can become complex when an industry uses several inputs (such as water, fuel, electricity, and iron ore) secured from different sources and the costs of the factors of production (land, labour and capital) vary from region to region.

The most serious criticism of the doctrine of comparative costs arises from the fact that most of international trade in manufactured goods is conducted under monopoly and oligopolistic conditions rather than under perfect competition. Monopoly profits from monopolies and oligopolies lower the gains from international trade by distorting the relationship of national cost ratios and national price ratios. It is quite possible, though, that such prices may be lower than those under pure competition because of economies of scale and technological advances. Thus even this criticism of the theory of comparative costs does not seriously challenge its validity.

## **Composition and Characteristics of Pakistan's foreign trade**

The development and diversification of Pakistan's foreign trade since 1947 is a great tribute to the zeal and enthusiasm of Pakistan's trading community and the commercial policies pursued by the Government of Pakistan. Foreign trade in the areas of the sub-continent which constituted Pakistan was wholly dominated by Hindus and Sikhs who migrated to India and thus created a vacuum which it was not easy to fill. The people who filled this vacuum and filled it with competence and diligence were mostly newcomers but they weathered the vicissitudes of fortune which are the general lot of businessmen venturing into international trade. It is true that some large fortunes were made but most of them were reinvested in the country. Small-time importers and exporters graduated into big-time businessmen, and they in turn entered the post-graduate school of economic activity that we call industry. Processing and light industry laid the foundations for a more sophisticated industrial development. The growth of shipping can also be attributed to the profits arising out of trading activity. It is to the credit of the Pakistani business community that their newly-acquired fortunes found their way into productive channels and were, by and large, not squandered on ostentatious living. There were a few exceptions, but they were not indicative of the norms of general conduct of the business class.

The character of Pakistan's economy at the time of Independence determined the pattern of her trade with other countries. In the earlier years it was predominantly agricultural. As a result, Pakistan was an importer of manufactured goods, mostly for consumption purposes, and an exporter of primary commodities mainly raw jute, raw cotton, tea, raw wool, and hides and skins. The direction of trade was also determined by the economic conditions of the country. The main trading partners of Pakistan were India, the U.K., Belgium, France, Italy, West Germany, the U.S.A, Japan and China.

As a matter of Economic History it is well to recall two significant events which occurred in 1949 and in 1950. In September 1949, the Pound Sterling was devalued and subsequently India and some other Sterling Area countries devalued their respective currencies. But Pakistan did not do so and India refused to recognise the new exchange rate between the currencies of the two countries.

Pakistan was thus compelled to diversify her trade. She had to find alternative markets for her exports and to find out new sources for the goods that she used to import from India. Efforts were also made to increase local production of consumer goods. As a result of the trade deadlock with India, the prices of Pakistan's major exports declined, and the value of her exports in 1949-50 was only Rs. 1297.1 crore. Consequently, imports had to be restricted.

In the second quarter of 1950, a short-term agreement was signed with India providing for the export of 8 lakh (800,000) bales of raw jute to that country in exchange for some cotton cloth, iron and steel products, mustard oil and other commodities. This revived the export of raw jute to India, which increased from only 0.7 million in 1948-49 to Rs. 18.32 million in 1949-50 and Rs. 225.5 million in 1950-51.

Later, in 1950, the Korean boom created a tremendous world demand for Pakistan's primary commodities and the export prices and foreign exchange earnings shot up. Imports were liberalised in June 1950.

Early in 1951, India recognized the par value of the Pakistan rupee and in February, 1951, the trade between the two countries was resumed on a long-term basis. As a result of these developments, the country's exports expanded substantially and imports were so liberalised that in July, 1951, 85 percent of imports were permitted without licence. But the boom was shortlived and the ending of the war in Korea had a sharp impact upon Pakistan's economy. The export prices and the foreign exchange earnings started declining. In 1951-52 the value of the country's exports fell by more than 20 percent from the level it had attained in the preceding year, whereas imports went up by more than 38 percent.

There was some change in the composition of exports and imports between 1947 and 1958. Some consumer goods industries had been set up and imports of consumer goods had been reduced and there was some increase in the imports of capital goods and industrial raw materials. However, consumer goods still accounted for 57 percent of all imports, capital goods for less than 17 percent and raw materials for slightly over 26 percent. With regard to exports, food and industrial raw materials accounted for most of the total. In 1958-59, the exports of manufactured goods amounted to only 11.3 percent.

By 1958-59, an appreciable change could be seen in the direction of Pakistan's foreign trade. India had lost most of its share of Pakistan's exports and imports; on the other hand, there had been a considerable increase in the exports to and imports from Japan and countries of Western Europe. Some trade relations had been built up with Hong Kong and some other under-developed countries. However, the U.S.A. and the U.K. continued to have major shares in Pakistan's export and import trade. Together with Canada, Japan and Western European countries, the share of the U.S.A. and the U.K. in 1958-59, was 76 per cent in imports and 64 percent in exports. Trade relations with the Eastern European countries and China were still limited. Some increases had occurred in Pakistan's trade with the under-developed countries of Asia and Africa but these did not claim any significant share of either exports or imports. Some efforts had been made to diversify the trade of the country, but the success achieved by 1958-59 was limited.

During the years 1958-59 to 1969-70 the composition of Pakistan's imports and exports was vitally influenced by the development of the economy. On the export side manufactured goods account for 43.6 percent, semi-manufactures for 23.3 percent, and primary commodities for only 33.1 per cent of total exports during 1969-70. The change in the composition of exports does not mean that the increase in proportion of manufactured goods was achieved at the expense of the export of food and raw materials. In fact, thanks to the increase in agricultural production, the exports of food and raw materials also increased. On the import side during 1969-70 capital goods accounted for 50.4 percent, industrial raw materials for 39.6 per cent, and consumer goods for only 10 percent of total imports. The composition of Pakistan's trade had come a long way since 1958 and had indeed travelled a great distance from 1947.

Between 1969-70 and 1974-75 the composition of both imports and exports took a rather unhappy trend. Imports of capital goods and industrial raw material for capital goods have lost a substantial part of their share to consumer goods and industrial raw material from consumer goods, as is apparent from Table 19.1.

TABLE 19.1

(Value in million Rs.)

Year (July-June)	Industrial raw materials									
	Capital Goods		Industrial raw materials				Consumer Goods		Total	
	Value Percentage Share		Capital Goods		Consumer Goods		Consumer Goods		Value Percentage Share	
	Value	Percentage Share	Value	Percentage Share	Value	Percentage Share	Value	Percentage Share	Value	Percentage Share
1969-70 ... ..	1,655.0	50.4	344.0	10.5	957.0	29.1	329.0	10.0	3,285.0	100.0
1970-71 ... ..	1,885.4	52.3	381.9	10.6	949.8	26.4	385.3	10.7	3,602.4	100.0
1971-72 ... ..	1,482.1	42.4	366.6	10.5	851.5	24.4	795.2	22.7	3,495.4	100.0
1972-73 ... ..	2,498.8	29.8	830.2	9.9	2,284.6	30.8	2,484.7	29.5	8,398.3	100.0
1973-74 ... ..	4,065.7	30.0	904.0	6.6	5,385.9	39.7	3,214.0	23.7	13,569.6	100.0
1974-75 ... ..	6,152.1	29.7	1,802.2	8.6	8,257.1	39.9	4,458.4	22.3	20,669.9	100.0

Source: Statistics Division.

On the export side the share of primary commodities in total exports has increased at the expense of manufactured goods and semi-manufactures as is apparent from Table 19.2.

TABLE 19.2

*Economic Classification of Exports*

(Value in million Rs.)

Year (July-June)	Primary Commodities		Semi-manufactures		Manufactured Goods		Total	
	Value Percentage Share		Value Percentage Share		Value Percentage Share		Value Percentage Share	
	Value	Percentage Share	Value	Percentage Share	Value	Percentage Share	Value	Percentage Share
1969-70 ... ..	531.7	33.1	375.4	23.3	701.5	43.6	1,608.6	100
1970-71 ... ..	650.3	32.6	472.2	23.6	876.0	43.8	1,998.5	100
1971-72 ... ..	1,510.4	44.8	913.8	27.1	947.2	28.1	3,371.4	100
1972-73 ... ..	3,365.6	39.4	2,583.3	30.2	2,602.3	30.4	8,551.2	100
1973-74 ... ..	4,007.3	39.4	2,293.8	22.6	3,860.1	38.0	10,161.2	100
1974-75 ... ..	5,813.2	48.3	1,308.2	12.6	4,046.8	39.0	10,368.1	100

Source: Statistics Division.

- Notes:—
1. Primary Commodities include raw cotton, linter and waste raw wool (including animal hair), fish and fish preparations, rice, hides and skins (including fur skins), tobacco unmanufactured, other primary commodities.
  2. Semi-manufactures include cotton yarn, leather tanned, molasses, oilcakes, agar, agar dust and wood, henna leaves and powder.
  3. Manufactured goods include cotton thread, cotton fabrics, woollen carpets, manufactures of leather footwear, sports goods (excluding indoor games), tobacco manufactured, medical instruments N.E.S. other manufactures.

Inter-zonal trade between West Pakistan and East Pakistan used to be quite substantial as the economies of the two wings had been developed on a complementary basis. The following Table indicates the extent of inter-wing trade in the two years following the disintegration of Pakistan.



TABLE 19.3

*Trade between West and East Pakistan*

(Million dollars)

Year	Imports from East Pakistan	Imports from rest of the World	Exports from East Pakistan	Exports to rest of the World
1969-70 ... ..	140.6	690.2	245.8	335.7
1970-71 ... ..	129.4	758.4	210.1	420.7

After December, 1971, with the separation of East Pakistan and the creation of Bangladesh, our imports and exports assumed new dimensions both in the composition and direction of foreign trade. Rice, cotton, cotton yarn, textiles, cement and quite a few manufactured goods like tyres and tubes, bicycles, pumps, and other light engineering and electrical goods which enjoyed the expanse of the East Pakistan market on a domestic basis had to look for alternative markets. The smoothness with which this was accomplished is a further tribute to our commercial organisations. On the import side, jute goods and consumer goods like tea, paper, board and stationery, newsprint, matches, spices, betel leaves and betel nuts had to be procured from sources other than Bangladesh; but this was a relatively easy matter. Trade again had been disrupted but the institutional structures were now better equipped to deal with the situation.

The composition of Pakistan's merchandise imports (excluding invisibles) is indicated in Table 19.4.

TABLE 19.4

*Merchandise Imports*

Million dollars

	1974-75	1975-76 (estimates)	% change
<b>CONSUMER GOODS</b> .. .. .	631	651	3.2
Wheat .. .. .	326	288	-11.6
Tea .. .. .	60	63	5.0
POL products .. .. .	125	160	28.0
Others .. .. .	120	140	16.7
<b>RAW MATERIALS FOR CONSUMER GOODS</b>	881	916	4.0
Crude Oil .. .. .	250	255	2.0
Fertilizer .. .. .	112	120	7.2
Edible Oil .. .. .	125	100	-20.0
Others .. .. .	394	441	11.9
<b>RAW MATERIALS FOR CAPITAL GOODS</b> ..	251	260	3.6
<b>CAPITAL GOODS</b> .. .. .	675	934	38.2
Roads vehicles and parts .. .. .	108	120	11.1
Railways .. .. .	45	60	33.3
Machinery and others .. .. .	522	754	44.4

TOTAL IMPORTS (C&F) .. .. .	2,438	2,760	13.2
FREIGHT .. .. .	238	260	9.2
IMPORTS (FOB) .. .. .	2,200	2,500	13.6

The composition of Pakistan's exports is indicated in Table 19.5.

TABLE 19.5

*Merchandise Exports*

		(\$ million)		
		1974-75	1975-76 (estimates)	% change
Raw Cotton .. .. .		121	155	28.1
Cotton Yarn .. .. .		100	150	50.0
Cotton Cloth .. .. .		150	175	16.7
Rice .. .. .		251	342	36.3
Basmati .. .. .		(160)	(162)	—
Coarse .. .. .		(91)	(180)	97.8
Others .. .. .		478	528	9.2
TOTAL		1,100	1,350	22.7

The item "others" includes fish and fish preparations, leather, footwear, cement, guar and products, tobacco and tobacco products, ready-made garments and hosiery, carpets and rugs, surgical instruments, sports goods, light engineering and electrical goods, all of which contributed most of the 478 million dollars and 528 million dollars estimated for exports under this head.

The growth of Pakistan's imports and exports during the four years ending mid-1975 are indicated in Table 19.6.

TABLE 19.6

*Growth of Pakistan's Imports and Exports in terms of Money Value*

Year	Percentage change in imports over previous year	Percentage change in exports over previous year
1971-72 .. .. .	-15.6	+40.3
1972-73 .. .. .	+24.8	+40.2
1973-74 .. .. .	+71.9	-24.3
1974-75 .. .. .	+68.6	+21.4

The rate of growth of Pakistan's exports is a matter of gratification and would indeed be more so if imports did not grow as they have done at a much faster rate.

In any case the increases in imports and exports largely reflect price increases rather than an increase in terms of physical quantities.

The physical growth of some of Pakistan's main imports and exports is indicated in Tables 19.7 and 19.8.

TABLE 19.7

*Physical Growth of Pakistan's Main Imports*

## QUANTITY

Year (July-June)	Fertilizer (000 tons)	Tea (000 lbs)	Edible Oils (000 cwt)	POL+ (000 tons)		Wheat (000 tons)	Sugar (tons)
				Crude	Product		
1960-61 .. .. .	164	—	—	—	2,109	—	93
1961-62 .. .. .	157	—	—	328	1,315	6,56	76,901
1962-63 .. .. .	N.A.	—	—	1,510	348	6,65	83,996
1963-64 .. .. .	24	—	—	2,090	224	8,64	1,206
1964-65 .. .. .	15	—	—	2,395	122	14,59	96,956
1965-66 .. .. .	172	—	—	2,664	163	7,39	66,711
1966-67 .. .. .	456	—	—	2,606	165	11,40	313
1967-68 .. .. .	451	—	—	2,961	190	14,07	8,174
1968-69 .. .. .	331	—	—	3,163	48	15	2,23,404
1969-70 .. .. .	651	—	—	3,043	254	1,77	67
1970-71 .. .. .	301	5,633	3,308	3,102	389	2,15	95
1971-72 .. .. .	156	69,236	9,54	2,953	434	6,94	11,064
1972-73 .. .. .	347	83,890	1,361	3,139	779	14,64	199,481
1973-74 .. .. .	670	83,512	2,597	2,968*	1,038*	11,68	44,100
1974-75 .. .. .	362	111,966	3,805	2,127	1,044	1,164	25

\* Estimates.

+ Figures on Calendar year basis.

Source: (1) Ministry of Agriculture.  
 (2) Statistics Division.  
 (3) Ministry of Fuel, Power and Natural Resources.

TABLE 19.8

*Physical Growth of Pakistan's Main Exports*

(Value in US million \$)

S. No.	Commodities	Unit	1972-73			1973-74			1974-75		
			Qty.	Value	Unit Value	Qty.	Value	Unit Value	Qty.	Value	Unit Value
1.	Raw Cotton	Tons	2,12,432	109.2	514.12	36,127	38.0	1015.84	197,278	155.9	790.26
2.	Cotton Yarn	000 lbs	4,01,936	186.2	0.46	2,16,464	183.1	0.85	167,149	86.0	0.51
3.	Cotton Cloth	Yards	5,99,646	119.6	0.20	4,15,726	143.1	0.34	468,181	132.6	0.28
4.	Rice	Tons	7,76,415	110.6	142.51	5,87,806	212.0	360.66	470,105	232.7	495.00

Source: Statistics Division.

The direction of trade during 1974-75, as indicated in Table 19.9 shows, that on the import side our main trading partners are Japan, the U.K., the U.S.A., the People's Republic of China, the U.S.S.R., Italy, West Germany, Kuwait, Poland, Saudi Arabia, Sri Lanka, France, Singapore, Indonesia, the Netherlands, Afghanistan, Yugoslavia, Czechoslovakia, Canada and Iran, while on the export side our chief customers are Japan, Hong Kong, U.S.A., U.S.S.R., Italy, West Germany, Kuwait, Poland, Saudi Arabia, Sri Lanka, France, Singapore, Iraq, Indonesia, Netherlands, Afghanistan, Dubai, Switzerland, Yugoslavia, Canada and Iran.

TABLE 19.9

*Direction of Trade*

(Million rupees)

COUNTRIES	1971-72		1972-73		1973-74		1974-75	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
1. Japan	350	540	721	1,562	1126.2	633.3	2632.6	699.1
2. Hong Kong	24	505	33	961	55.3	1,116.9	105.1	786.9
3. U.K.	353	260	683	630	950.2	686.6	1229.7	687.0
4. U.S.A.	729	174	2,094	349	3,451.8	540.5	2,908.5	383.6
5. People's Republic of China	99	146	362	193	570.9	39.3	535.0	150.8
6. U.S.S.R.	84	136	165	223	181.2	256.1	409.5	316.7
7. Italy	192	125	231	434	300.2	491.2	599.0	250.0
8. West Germany	344	115	749	306	1,050.7	463.5	1491.3	462.8
9. Kuwait	63	103	204	92	498.1	146.4	1224.2	183.3
10. Poland	102	95	187	118	201.3	142.8	228.2	164.5
11. Saudi Arabia	92	81	366	128	892.9	396.6	1559.1	620.9
12. Sri Lanka	109	65	298	205	356.0	128.4	546.1	600.4
13. France	76	62	122	183	342.5	266.0	501.4	194.8
14. Singapore	26	61	143	296	182.6	382.0	195.2	117.4
15. Iraq	5	55	7	106	8.1	206.6	188.1	313.3
16. Indonesia	10	50	7	659	119.8	932.9	324.1	131.4
17. Netherlands	63	50	183	132	514.8	159.0	391.8	135.5
18. Afghanistan	103	44	129	36	187.9	81.9	228.6	127.8
19. Dubai	6	41	9	110	16.9	194.8	118.6	296.7
20. Bulgaria	20	38	22	46	21.0	2.1	31.2	12.9
21. Switzerland	37	37	78	103	60.6	216.8	99.5	131.3
22. Yugoslavia	60	35	76	121	144.4	186.9	135.7	118.9
23. Czechoslovakia	52	32	45	49	96.5	14.4	77.0	36.5
24. Canada	43	31	120	77	514.3	137.4	648.4	77.0
25. Iran	64	21	98	60	221.4	329.2	116.8	594.2
26. Turkey	9	1	55	1	20.3	2.9	20.9	6.1
27. Other Countries	380	468	1,211	1,371	1,483.7	2,006.7	4124.3	2686.5
TOTAL:	3,495	3,371	8,398	8,551	13,569.6	10,161.2	20669.9	10286.3

*Source: Pakistan's Basic Facts by Ministry of Finance***Balance of Trade**

**Balance of trade** is the difference between the monetary values of a country's visible imports and exports. Exports and imports of merchandise fall in this category. When the value of visible exports exceeds the value of visible imports in a given period of time (normally a year), the country's balance of trade is said to be favourable, and if the value of imports exceeds that of exports it is said to be unfavourable. A consistently unfavourable balance of trade and inflow of capital are normal features of a developing economy. The foreign trade problems of a semi-industrial country in the process of industrialisation, like Pakistan, can be more serious than those of an industrial or a wholly agricultural economy. Its exports can rise only gradually but it is forced to increase its imports rapidly.

An economy in the process of industrialisation has heavy requirements of capital goods, of fuel and raw materials, which must be imported. The monetary sector of the economy tends to

expand rapidly, increasing the demand for imported goods or absorbing local products that might otherwise be exported. New industrial plants take a while to get into full production, and the increased demand often runs ahead of the increased output. In the early stages of economic development, therefore, its unfavourable effects on foreign trade generally outweigh the stimulating effects.

Production in the traditional primary sector develops relatively slowly and is subject to fluctuations. Moreover, fluctuations in world demand have a disproportionate impact on production and export earnings. Since the trade of most under-developed countries is heavily dependent on one or a very few commodities, these countries generally have a relatively weak bargaining position in relation to the industrialised nations, and are adversely affected by policy decisions of the latter. Pakistan was no exception to the general trend in developing countries to suffer from an unfavourable balance of trade. As indicated in Table 19.9 with three exceptions, *viz.*, 1947-48 (Pakistan's first 10½ months of existence), 1951-52 (year of the Korean boom), and 1972-73 (which witnessed a commodity boom caused by a combination of crop failures and panic buying by the industrialised countries), Pakistan has in every other of its 28 years suffered from a deficit in its balance of trade and this deficit reached an unprecedented peak figures in 1974-75.

TABLE 19.10

*Balance of Trade*

(In Million Rs.)

Years	Imports	Exports	Balance
1947-48*	318.8	456.2	(+) 137.4
1948-49	1,176.8	528.5	(-) 648.3
1949-50	912.2	565.2	(-) 347.0
1950-51	1,167.1	1,342.5	(+) 175.4
1951-52	1,473.9	921.9	(-) 552.0
1952-53	1,017.3	867.4	(-) 149.9
1953-54	824.3	641.0	(-) 183.3
1954-55	783.0	491.4	(-) 291.6
1955-56	964.5	742.4	(-) 222.1
1956-57	1,516.0	698.2	(-) 817.8
1957-58	1,314.3	433.6	(-) 880.7
1958-59	1,024.6	444.4	(-) 580.2
1959-60	1,805.7	763.1	(-) 1,042.6
1960-61	2,173.2	540.2	(-) 1,633.0
1961-62	2,236.3	542.9	(-) 1,693.4
1962-63	2,800.1	998.1	(-) 1,802.0
1963-64	2,981.6	1,075.0	(-) 1,906.6
1964-65	3,672.4	1,139.6	(-) 2,532.8
1965-66	2,880.3	1,203.6	(-) 1,676.7
1966-67	3,625.7	1,297.3	(-) 2,328.4
1967-68	3,327.2	1,644.8	(-) 1,682.8
1968-69	3,046.5	1,699.9	(-) 1,346.6
1969-70	3,285.1	1,608.6	(-) 1,676.5
1970-71	3,602.4	1,998.4	(-) 1,604.0
1971-72	3,495.4	3,371.4	(-) 124.0
1972-73	8,398.3	8,551.2	(+) 152.9
1973-74	13,569.6	10,161.2	(-) 3,408.4
1974-75	20,669.9	10,358.8	(-) 10,310.8

\*15th August to 30th June.

Note:—The Pakistan rupee was devalued on the 11th May, 1972 and figures for 1971-72 include

the pre-devalued exchange rate of Rs. 4.76 to a dollar and the post-devaluation rate of Rs. 11 to a dollar. Due to the devaluation of the dollar in February, 1973, the rupee was revalued to Rs. 9.90 to a dollar.

Source: Statistics Division.

## Terms of Trade

The terms of trade are a critical factor in determining the net impact of a country's international trade on its economy as a whole. The terms of trade reflect a comparison of the prices of a country's imports with the prices fetched by its exports. If the prices of imports rise relatively to the prices of exports then the terms of trade become less favourable. If, on the other hand, the prices of exports rise relatively to the prices of imports then the terms of trade become more favourable. Thus the terms of trade move against a country if it has to sell a greater volume of exports in order to obtain a constant level of imports. The terms of trade are measured by an index number computed from the export and import price indices as follows:

$$\frac{\text{Index of export prices}}{\text{Index of import prices}} \times 100.$$

Any increase in this figure implies a favourable movement in the terms of trade and a decrease in this figure implies an adverse movement.

Table 19.11 indicates the unit value of imports and exports and terms of trade from 1960-61 to 1974-75.

TABLE 19.11

### *Indices of Unit Value of Imports and Exports and Terms of Trade*

I M P O R T S																E X P O R T S			
Year (July-June)	Terms of Trade	Gen- eral	Food	Be- verages and Tobacco	Crude Mate- rials	Mine- rals, Fuels and Lubri- cants	Ani- mal and vege- table oil	Chemi- cals	Manu- fact- ured Goods	Machi- nery, Trans- port Equip- ment	Misc. Manu- factured Goods	Gen- eral	Food	Crude Mate- rials	Manu- fact- ured Goods				
1960-61	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00				
1961-62	92.4	110.4	101.4	136.8	108.6	115.3	109.0	126.1	100.6	119.0	101.7	102.5	112.8	100.6	100.4				
1962-63	88.2	114.1	105.1	125.8	111.5	111.2	115.1	112.2	112.7	123.8	102.8	100.5	123.9	96.4	95.7				
1963-64	85.3	118.5	104.8	162.4	114.3	137.9	101.3	118.1	113.6	121.0	139.9	100.5	120.9	97.3	95.0				
1964-65	90.0	116.1	106.4	125.7	121.1	143.1	118.3	124.7	116.1	109.0	114.8	104.5	119.0	102.5	100.6				
1965-66	96.3	113.0	102.4	125.1	115.9	137.4	132.3	104.3	112.2	113.1	119.3	108.5	125.6	105.9	105.5				
1966-67	90.5	117.0	103.9	142.4	110.2	153.8	131.9	118.1	113.3	115.1	109.7	105.9	140.3	99.4	99.5				
1967-68	94.2	115.2	96.7	151.2	97.5	136.9	108.2	110.1	119.3	120.2	116.1	108.6	179.1	93.5	98.4				
1968-69	93.9	114.5	95.2	141.1	111.3	129.8	96.3	147.0	112.4	113.8	103.9	107.6	185.9	88.7	99.6				
1969-70	86.8	122.2	110.7	150.3	96.6	173.3	95.9	164.0	127.6	101.5	85.0	106.1	159.1	91.5	103.4				
1970-71	89.8	124.7	98.4	152.6	99.2	187.3	113.0	194.4	127.4	97.2	108.7	112.0	148.0	110.2	97.2				
1971-72	97.1	134.3	106.2	150.3	99.8	182.8	121.8	220.5	132.7	114.6	99.7	130.3	172.5	122.9	121.5				
1972-73	94.6	273.9	258.2	182.7	273.8	235.6	238.9	374.7	294.9	257.4	192.2	258.3	272.9	223.3	307.4				
1973-74	95.8	358.6	382.0	280.8	385.6	388.2	353.4	594.4	365.9	255.6	238.9	343.4	357.6	279.7	439.1				
1974-75	92.4	475.7	458.3	355.7	394.5	725.5	455.2	685.8	554.6	297.7	295.5	439.2	613.2	407.7	404.7				

Source: Statistical Division.

Using 1960-61 as the base year the terms of trade have slowly but surely moved against Pakistan thus making a poor country even poorer, although there has been a little recovery here and there in the intervening years. The difference of 5 per cent may not appear much but in absolute terms it would amount to a loss of \$200 million on an annual total foreign trade of \$4 billion. On the side of imports the highest increases have been in the case of food items, such

as wheat and vegetable oil, petroleum products including fertilizers, and manufactured goods. The export prices of Pakistan's raw materials and manufactured goods have registered an increase of almost 4 times as in 1975 as compared to 15 years ago.

Using 1954-55 as the base year, a substantial improvement in the terms of trade of Pakistan is noticeable between 1958-59 and 1966-67. The figures for these years were 79.5 and 118.1 respectively, an improvement of 48.5 per cent. This was attributed to increased exports of manufactured goods, whose prices were more stable than those of primary commodities.

In the mid-seventies there are continuing and endless national and international discussions on the establishment of a new economic order. Despite the high-sounding verbosity all that it amounts to saying is that a just and equitable relationship should be established between the prices of raw materials (including crude oil) and manufactured goods (particularly plant and equipment and the more sophisticated manufactured goods).

In other words the terms of trade should stop moving against the primary producing countries, and should, in fact, start moving against the industrialised countries and in favour of the Third World which produces mostly raw materials. The O.P.E.C. (Oil Producing and Exporting Countries), under the leadership of His Imperial Majesty the Shah of Iran, are insisting on maintaining the purchasing power of their oil wealth vis-a-vis the products of the industrialised world and demand that any inflationary increase in the prices of the exports of the industrialised world should be matched by a corresponding increase in oil prices. For good measure the O.P.E.C. countries and France also agreed that any conference between oil consumers and oil producers should also simultaneously consider matters relating to pricing and trade stabilization of raw materials other than oil. The status of oil in international trade is of a very high order as compared to other raw materials like cotton, jute, vegetable oil, rice, wheat, copper, zinc, coffee, tea, cocoa, and rubber in which the non-OPEC countries of the Third World are largely interested. Moreover the oil producers are quite capable of organising an effective cartel to control the prices and production of oil, and this would prove rather a difficult proposition to work out and finance in the case of most other raw materials. No economic group would be agreeable to a massive transfer of wealth in favour of a weaker group, particularly when the latter is by its very nature in a weak bargaining position.

The moral conscience of the world has not yet reached a pitch which would presage a healthier movement in the terms of trade for those who till the earth, despite all "impeachments at Turtle Bay". This matter was first raised in depth by the author as a member of the Pakistan delegation to the United Nations Economic and Social Council at its 17th Session in 1954. The idea of commodity trade stabilisation with a view to providing an equitable relationship between the prices of raw materials and manufactured goods was then considered Utopian. After 21 years people, and important people at that, have put forward this thought boldly and demand action on it as a matter of right. Perhaps, the man behind the plough is at long last moving to get his fair share of the world's wealth. In this context one can also visualise an unhappy scenario in which oil prices and those of plant and equipment establish a happy parity, and the Devil takes care of the hindmost.

## Relationship of Aid and Trade

There is an intimate relationship between Trade and Aid. While Aid can never be a substitute for Trade, yet it is necessary in the formative stages of economic development to establish a sound production base on which to build up Trade. Were it not for the billions of United States dollars that flowed into Western Europe under the Marshall Plan, that region could not during the mid-fifties start demanding more Trade instead of Aid. The Marshall Plan had been an unequivocal success in permitting the economies of the countries, which later constituted the ECM (European Common Market) and EFTA (European Free Trade Area) to establish permanent institutional arrangements for a free flow of goods and services. In developing countries Aid not only provides the much needed capital resources for all facets of economic and social development but also firmly lays and develops the base for an ever-expanding international trade, both in terms of imports and exports.

The author was advised by an old colleague to devote a separate chapter to Aid in view of its importance to Pakistan or, in the alternative, or to include this topic in the Chapter on "Planning" as Aid vitally affected the whole range of economic and social activity in Pakistan. While there is great merit in this line of thinking it was felt that the portion dealing with foreign aid could be more appropriately dealt with under Trade because both Trade and Aid are critical components which enter into exports, foreign exchange and imports. It should be mentioned, though, that in the short run while Aid constitutes an unrequited transfer, Trade involves mutual exchange of goods and services. In the long run, however, it is only the development of exports and import substitutions by domestic production that can enable developing countries to continue their growth without the help of international assistance received on concessional terms.

The first United Nations Conference on Trade and Development (UNCTAD) held in 1964 stressed the desirability of dealing with simultaneously commercial relationships and aid problems, which in the post-war world had been considered quite separately. At this UNCTAD conference it was recognized that the growth of the developing countries would require substantial adjustments in the economies of the industrialised countries which the latter might not accept without reluctance. It has become fashionable to refer to Aid as a "soft option" as compared to these adjustments in the sphere of Trade.

In a country such as Pakistan where aid during 1974-75 financed about half of the country's imports and was a little more than its total export earnings, and where foreign debt servicing accounted for 23.1 per cent of export earnings, the relationship between trade and aid is indeed a very close one.

## Balance of Payments

Balance of payments refers to the difference between total payments into and out of a country during a given period of time, which is normally one year. Thus payments and receipts include all visibles and invisibles. Visible payments and receipts refer to imports and exports of merchandise and bullion which are tangible. Invisibles refer to all those current transactions featuring in the balance of payments which do not represent international trade in goods. Invisibles may be divided into four main groups:—

- i) Value of services provided to or received from other countries in fields such as shipping, travel, insurance, banking, tourism, and so on;
- ii) income received from all forms of investments outside the country and income payments made on capital liabilities within the country to the foregoing;
- iii) Payments and receipts by Governments including the cost of diplomatic representations, military expenditure overseas, and grants to overseas countries;
- iv) Gifts and similar transactions not included under (iii) above.

The balance of payments records both the debit and the credit side of the accounts, since every transaction in the country involving foreigners consists of an entry either on the credit or the debit side of the balance of payments. Credit transactions involve receipts from foreigners while debit transactions involve payments to foreigners.

The credit side would include the following items:—

- i) exports of merchandize;
- ii) transport and communications services provided to foreigners;
- iii) purchases of foreigners within the country;
- iv) services provided by the country's capital in foreign production;
- v) insurance, banking and other services sold to foreigners;
- vi) investments in the country by foreigners;
- vii) gifts received from foreigners;
- viii) unrequited and long-term capital transfers from outside the country;
- ix) export of monetary gold.

The items which constituted the debit side of the balance of payments consist of:

- i) imports of merchandize;
- ii) transport and communications services provided by foreigners;



- iii) purchases of residents outside the country;
- iv) services provided by foreign capital in the country's production;
- v) insurance, banking and other services provided by foreigners;
- vi) investment outside the country by residents;
- vii) gifts made to foreigners;
- viii) current payment in other countries on account of cost of diplomatic representations, military expenditure overseas, and grants to overseas countries;
- ix) unrequited and long-term capital transfers to foreign countries;
- x) Imports of monetary gold.

It is also necessary to distinguish between current transactions and capital transactions. All merchandise and service transactions are entered under current transactions, while all investments, monetary gold, unrequited and long-term capital transfers should normally be entered under capital transactions. The current account indicates whether a nation is living within its means inasmuch as it is earning enough through exports of merchandise and services to provide for its spending on the imports of merchandise and services. When a country is earning more than it is spending internationally, its net balance on current account is a credit, and when current payments exceeds current receipts the net balance on current account is a debit. It should be noted that a credit entry on current account would always be accompanied by a debit entry on the capital account and vice versa as the two accounts must perforce balance. The capital account shows the extent to which the country is receiving unrequited and long-term transfers of capital, the effect of foreign investment either way, and whether it is a net exporter or importer of monetary gold.

The capital account also indicates whether there is a capital inflow into the country or a capital outflow from the country. Normally, a country experiences a capital outflow when it becomes more of an international creditor or less of an international debtor. Conversely there is the capital inflow when a country becomes an international debtor or less of an international creditor. Capital outflows and capital inflows are also referred to as capital exports and capital imports. It would thus be clear that capital inflows and exports of merchandise and services give rise to foreign exchange receipts (credits), while capital outflows and imports of merchandise and services give rise to foreign exchange payments (debits).

The balance of payments in Pakistan is measured by the following groupings:

- a. Goods and services: These include merchandise, non-monetary gold, freight and insurance on international shipments, other transportation, travel, investment income, governmental sector not included elsewhere, and other services (non-merchandise insurance and others).
- b. Unrequited transfers: These include remittances by private individuals (mostly from Pakistanis abroad) and foreign grants.
- c. Allocation of Special Drawing Rights by the International Monetary Fund.
- d. Capital and monetary gold: These cover private long-term investment including all direct investment, private short-term investment, capital transactions of local governments, capital transactions of Central Government (including long-term loans, other long-term assets and liabilities, and other short-term assets and liabilities).
- e. Central monetary institutions and other institutions include these accounts with the IMF marketable assets, deposits, gold, Special Drawing Rights, and other foreign assets and liabilities.

The balance of payments position of Pakistan from 1972-73 to 1974-75 is indicated in Table 19.12.

TABLE 19.12

*Balance of payments position*

(Million U.S. Dollars)

Items	1972-73			1973-74			1974-75		
	Credit	Debit	Net position	Credit	Debit	Net position	Credit	Debit	Net position
A. Goods and Services (1 throughs)	919.7	1195.8	- 275.8	1238.81	1936.9	- 698.8	1287.8	2753.1	1465.4
1. Merchandise	766.6	891.2	- 184.6	1019.7	1493.1	- 1473.1	977.5	2174.5	1196.9
2. Non-Monetary Gold	—	—	—	—	—	—	—	—	—
3. Freight and insurance on international shipments	3.4	82.0	- 78.5	2.0	153.9	- 151.9	1.6	214.6	213.0
3.1 Freight	0.4	36.8	- 35.5	—	146.8	- 146.8	—	204.0	204.0
3.2 Insurance	3.1	5.8	- 2.6	2.0	7.1	- 5.1	1.6	10.6	8.9
4. Other transportation	57.3	35.7	+ 21.7	97.5	65.7	+ 31.8	128.1	55.3	72.8
5. Travel	15.1	29.8	- 14.7	20.3	35.5	- 15.2	27.5	45.8	18.3
6. Investment Income	17.3	101.5	- 84.2	96.1	168.1	- 72.0	37.4	134.5	97.1
7. Government n.i.e.	37.7	32.7	+ 5.0	27.6	45.0	- 17.4	39.9	68.1	28.1
8. Other services	22.2	22.3	- 8.0	34.9	35.6	- 0.7	75.4	60.1	15.3
8.1 Non-merchandise insurance	2.7	5.7	- 3.8	1.7	2.0	- 0.3	1.2	4.1	2.8
8.2 Other	19.6	16.6	+ 2.9	33.2	33.8	- 0.6	74.1	55.9	18.2
B. Unrequited Transfers (9 plus 10)	181.1	6.1	+ 175.0	222.7	5.1	+ 217.6	338.5	5.1	333.4
9. Private	146.3	1.8	+ 145.0	151.8	6.9	+ 150.3	229.9	0.5	229.4
10. Government	34.8	4.8	+ 30.0	71.5	4.2	+ 67.3	108.6	4.5	104.0
C. Allocation of SDRs	—	—	—	—	—	—	—	—	—
D. Capital & Monetary Gold (a plus b)	378.8	206.0	+ 92.8	635.7	149.2	+ 486.5	1590.2	471.6	1118.6
a. Non Monetary Sector (11 through 14)	355.6	102.8	+ 252.8	451.8	113.0	+ 338.8	1135.9	156.8	979.1
11. Private long-term	58.7	45.9	+ 12.8	100.9	43.4	+ 57.5	144.8	49.1	95.7
11.1 Direct Investment	—	0.3	- 0.3	—	6.3	- 6.3	23.5	10.2	13.2
11.6 Loans	58.7	45.6	+ 13.1	100.9	37.1	+ 63.8	121.3	38.8	82.5
12. Private Short term (other than direct investment)	1.0	—	+ 1.0	0.1	—	+ 0.1	1.0	0.9	0.1
13. Local Governments	33.0	41.8	- 8.8	106.0	37.0	- 69.0	123.7	34.2	89.5
14. Central Government	262.9	15.1	+ 247.8	244.8	32.6	+ 212.2	866.2	72.5	793.7
14.4 Long Term Loans	221.2	15.1	+ 206.1	237.1	26.0	+ 211.1	734.7	58.4	676.4
14.5 Other Long Term Assets and Liabilities	9.5	—	+ 9.5	7.7	—	+ 7.7	4.7	6.6	2.0
14.6 Other Short Term Assets and Liabilities	32.2	—	+ 32.2	—	6.6	- 6.6	126.7	7.5	119.2
b. Monetary Sector (15 plus 16)	23.3	183.2	- 159.5	183.9	36.2	- 147.7	454.3	314.8	- 139.5
15. Central Monetary Institutions	11.5	162.6	- 151.1	128.7	8.3	- 120.4	398.8	278.1	- 120.7
15.1 Accounts with IMF	—	4.5	- 4.5	33.2	—	- 33.2	201.0	—	201.0
15.2 Marketable Assets	—	25.3	- 25.8	21.9	—	- 21.9	42.3	63.9	- 21.5
15.3 Deposits Assets—Liabilities	—	125.5	- 125.5	52.5	—	- 52.5	142.3	214.3	- 71.8
15.6 Gold	—	0.5	- 0.5	—	8.3	- 8.3	—	—	—
15.7 Special Drawing Rights	11.5	—	+ 11.5	1.1	—	+ 1.1	13.0	—	13.0
16. Other Monetary Institutions	11.8	20.6	- 8.5	55.2	27.9	- 27.3	55.4	36.6	- 18.7
16.2 Deposits Assets and Liabilities	11.8	—	+ 11.8	—	27.9	- 27.9	37.3	36.6	- 0.6
16.4 Other Foreign Assets and Liabilities	—	20.6	- 20.6	54.7	—	- 54.7	18.1	—	18.1
E. Errors and Omissions Net	7.4	—	+ 7.4	—	5.3	- 5.3	36.4	23.0	- 13.4

Note: — In monetary sector and items 14.5 and 14.6 of Non-Monetary Sector, an increase in assets or a decrease in liabilities gives a debit entry, whereas a decrease in assets or an increase in liabilities generates a credit entry.

Four points clearly emerge from the analysis of the balance of payments:

- i) Any item that causes a purchase of foreign currency is recorded as a debit item in the balance of payments accounts, and any item that permits a sale of foreign currency is recorded as a credit item.
- ii) A deficit on current account must be matched by a surplus on capital account which implies either foreign borrowings or a reduction in the foreign exchange and gold resources held by the domestic central bank.
- iii) A surplus on current account has to be matched by a deficit on capital account which means that the country concerned is either extending loans and gifts to foreigners, or is increasing the gold and foreign exchange reserves held by the Central banking authority.
- iv) When we speak of balance of payments surpluses and deficits we refer to the balance of payments on current account because a deficit in any one of them must be matched by a surplus in the other.

The balance of payments statement of a country represents a balance-sheet of its international economic relationships. The balance of payments is of particular importance to the Government which is charged with the responsibility of maintaining economic stability. In fact the constraints imposed by a country's balance of payments position make it necessary for even popularly elected Government to undertake harsh and unpopular measures for correcting chronic unfavourable trends in its international payments. No country in the world can afford to rely for all time on a positive net flow of unrequited and long-term capital movement. A stage does come when a country has to learn to live within its means. Similarly, it would not be worthwhile for any country to keep on accumulating *ad infinitum* foreign exchange reserves and monetary gold beyond what can be justified as prudent stand-by arrangements.

The balance of payments position of a country also influences the decisions of business people in general since they can foresee the intimate relationship between the balance of payments situation and the future course of governmental policy.

It has been pointed out in the preceding section that all developing countries (barring the oil producers) experience serious balance of payments difficulties on current account once they embark on accelerated economic and social growth. There is a tremendous upsurge in the demand for capital equipment, industrial raw materials, spare parts and fuel. The growth of economic activity leads to an increase in the demand for consumption goods, including food-stuffs, and this, in turn, places a severer stress on imports while at the same time reducing the surpluses available for export. The demand for the exports of the newly established countries among the developing countries does not keep pace with the increases on the debit side. After a certain length of time the servicing of the international debt used in the developmental process causes further strains on the balance of payments on current account which have to be met by long-term transfers from institutional sources, such as the World Bank group and the Asian Development Bank, allocations from the Institutional Monetary Fund including the allotment of Special Drawing Rights, and loans from developed countries and oil producers. These payments appear on the credit side under capital transactions.

There are some well-established methods for correcting adverse balance of payments on current account, such as stimulating exports, reducing imports, devaluing the currency in order to increase the domestic price of imports and raise the foreign exchange cost of exports, exchange control measures which would reduce the foreign payments for merchandise and services, and cooling down or deflation of the economy.

## Exchange Rates

Exchange rates refer to the price of one currency in terms of another. They represent the proportion in which two different currencies are exchanged. Foreign exchange transactions are concerned with the exchange of one currency for another, the demand for a foreign currency

arising out of the indebtedness incurred in the course of paying for goods and services. The matter was relatively simple in the old days when all currencies were largely in the form of coins and bullion. The currencies of the various countries in modern times are not seriously backed by gold and/or stable foreign exchange reserves. The real backing is current and potential economic strength and political stability of the country concerned.

After World War I the most popular theory relating to exchange rates was stated by Cassel, a Swedish economist. Cassel expounded the **Purchasing Power Parity Theory** which stated that the rate of exchange between two countries depended essentially on the internal purchasing power of their currencies. This theory only holds true in the long run and need not apply in all cases, particularly when there is no permanence about the goods and services which do or do not enter in international trade. Even in the long run, the theory may not hold on account of changes in transport cost, and tastes, customs, tariffs, and the par value of currency. It should be emphasised that the Purchasing Power Parity Theory does explain the ultimate rather than the immediate forces determining the rate of exchange. The theory actually goes to the root causes of the problems caused by the imbalance of trade by emphasising the influence of price levels on the determination of exchange rates.

Keynes criticises Cassel's theory on two grounds:

- i) Cassel did not take into consideration the elasticity of reciprocal demand, which means the responsiveness of one country's demand for another country's exports with respect to prices and incomes. Also technological improvements which add to the productivity of cheaper and better goods and tariff changes and export substitutes affect exchange rates through their influence upon reciprocal demand quite independently of international price movements.
- ii) The Purchasing Power Parity Theory ignores the influence of capital movements. There is "hot money" in the form of short-term capital movements moving from one country to another trying to make a profit on exchange fluctuations, and there is refugee capital seeking safety and security abroad. The capital inflow tends to raise the value of the currency of the capital receiving country and a capital outflow tends to lower it. Long-term movements of capital also have a similar effect.

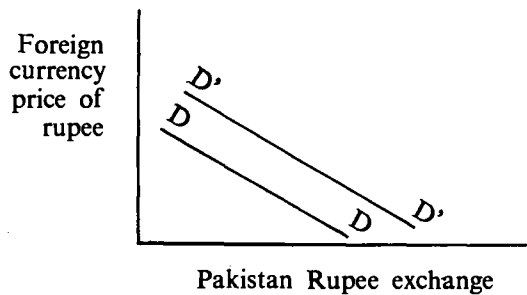
The **Modern Theory of Exchange Rates** emphasises the importance of the factors of demand and supply as reflected in the balance of payments position being the key determinants of exchange rates.

In a free market the rate of exchange is determined by the forces of supply and demand, the demand for foreign exchange originating in the debit items of the balance of payments while the supply of foreign exchange originates in the credit items of the balance of payments.

The amount of foreign exchange demanded varies inversely to its price, that is, the amount demanded at high rates is less than that demanded at a lower rate. A high rate of exchange makes imports dearer to domestic purchasers because they must offer more local money to obtain one unit of foreign currency. A high rate of exchange thus reduces the volume of exports and thus the foreign exchange demanded. A lower rate of exchange on the other hand makes imports cheaper for domestic buyers because they offer less domestic money to obtain one unit of currency and thus stimulates imports and increase the amount of foreign exchange demanded.

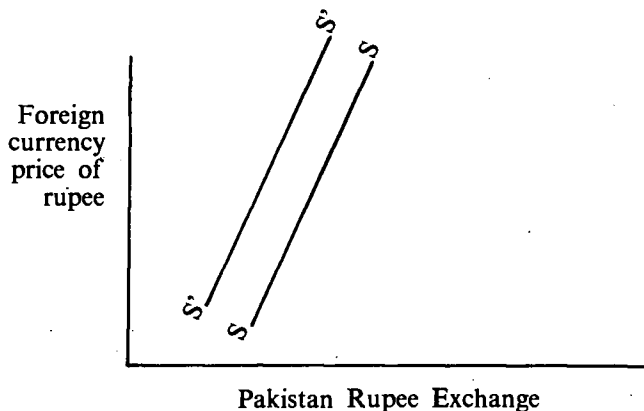
As indicated in the supply and demand analysis relating to prices, changes in income, costs, prices, tastes and other factors may cause shifts in the debit items of the balance of payments independently of the exchange rate. When this happens the entire demand curve shifts either to the left or to the right depending on whether or not there has been a decrease or an increase in the volume of debit transactions. The diagram below illustrates an upward movement in the demand schedule for foreign exchange occasioned by an increase in the demand for imports following an increase in national income.

### Demand for foreign exchange at Karachi

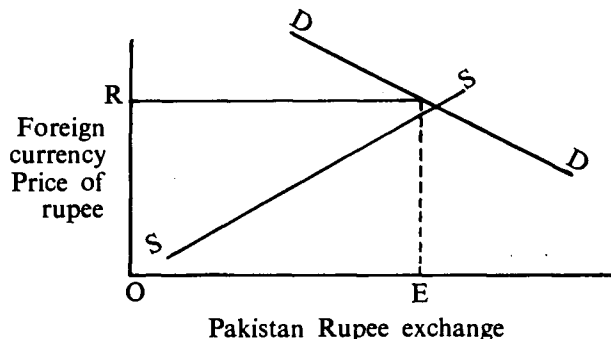


D' D' is the new demand schedule for the foreign exchange demand following an increase in national income in Pakistan.

Unlike the demand schedule for foreign exchange, reflecting the debit side of the balance of payments, the amount of foreign exchange that is supplied to the market varies directly with the rate of exchange and is reflected on the credit side of the balance of payments position. When the exchange rate is high domestic prices appear low for foreigners since they are able to acquire a unit of domestic money with a smaller amount of their own currency. This makes domestic exports cheaper, stimulates them and thereby provides a larger supply of foreign exchange in the market. Conversely, a low rate of exchange restricts exports and lowers the amount of foreign exchange offered to the market. A shift of the entire supply schedule either to the left or to the right can occur in the credit items of the balance of payments through factors other than the exchange rates. For instance, a shift of the supply curve to the left would occur if reduced economic activity caused a decrease in Pakistan's exports, and this would decrease the amount of foreign exchange made available to the market at each exchange rate (as in the diagram below). The supply of the Pakistan rupee in the foreign exchange market has been reduced to the extent that the supply curve S'S' has shifted to the left.

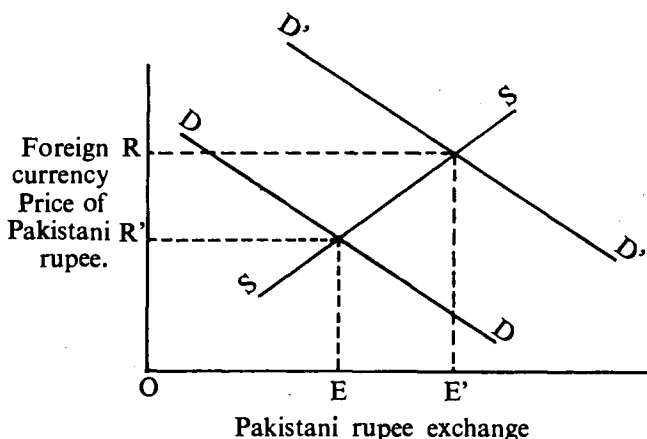


As in the case of demand and supply of anything else, the rate of exchange is determined by the interaction of the demand and supply curves of the currency concerned.



The rate of exchange of the Pakistani rupee and foreign currencies would be OR as indicated in the diagram above. At this rate the amount supplied is equal to the amount demanded.

Should the demand by foreigners for Pakistani rupees increase, the demand curve would move to the right and the exchange rate of the Pakistani rupee would improve to OR' as in the diagram below against its earlier rate of OR.



In a free market the rate of exchange is determined by the supply and demand of foreign exchange, which in turn are derived from the credit and debit items respectively of the balance of payments. The rate of exchange itself influences the balance of payments by its shape of demand and supply schedules of foreign exchange. Thus the rate of exchange and the balance of payments enjoy a mutual relationship in the sense that each of them is determined by the other.

Exchange rates are generally kept stable and allowed to oscillate only within very narrow margins (normally the small difference between buying and selling rates). For instance, the buying rate of the Pakistan rupee is Rs. 9.90 to the U.S. \$ while its selling rate is Rs. 10 to Rs. 10.10. Fluctuating rates of exchange can create serious problems because when the exchange rate varies it affects the prices of all exports to foreign buyers and of all imports to domestic buyers. Fluctuations create a greater measure of uncertainty not only in international trade; it also subjects lenders and borrowers of capital to this exchange risk. The availability of **forward exchanges** (a foreign exchange transaction under which a contract is made to exchange one currency for another at a fixed date in the future at a specified rate of exchange) provides a measure of security to foreign traders, and to a lesser extent to foreign investors. In order

to stabilise the rate of exchange it is necessary for the Central Bank to have adequate supplies of domestic and foreign exchange to offset movements in the demand and supply of foreign exchange to any desired degree.

In all developing countries and centrally planned economies as well as in some industrialised countries there are restrictions on private transactions in foreign exchange. Generally, private transactions in foreign exchange are subject to the discipline of Government and are controlled by the Central Bank. Since the controlling authority cannot generally influence the level of the credit items in the balance of payments, that is, the supply of foreign exchange, the control is exercised by various constraints on the debit items of the balance of payments, that is, demand for foreign exchange. Rationing in allocation of foreign exchange of the demand side forcibly chokes off the excess demand for foreign exchange.

Another set of foreign exchange transactions, which are called **arbitrage**, tend to equalise the price of a currency in all foreign exchange markets. Arbitrage involves the simultaneous purchase and sale of a currency in different foreign exchange markets so as to make a profit whenever there is even slight difference in the rate of exchange between two or more markets. This naturally stabilises the value of the currency in all foreign exchange markets.

It is the bounden duty of every country to determine its rate of exchange on the basis of a cold-blooded analysis of the economic factors involved without getting involved in any false considerations of national prestige and dignity. Devaluation can only help a country if the elasticity of demand for its exports is sufficiently high to offset the adverse effects of such a decision by making imported merchandise and services and capital repayments more expensive in terms of domestic currency. Again, it is also necessary that the elasticity of supply of its export goods should be sufficiently high to meet the increased external demand which would follow from a devaluation decision, making its goods cheaper in terms of foreign currencies. Unless these two conditions are fulfilled, devaluation does not really help, and there is the additional disadvantage of having to pay more in terms of domestic production in order to secure the same quantity of imports. Devaluation can help industrialised countries where the response of production to changed market conditions can be a quick and positive one, but in the case of agricultural economies, including those producing simple manufactured goods, the response cannot generally be adequate. Many a developing country has learned to its cost the high price it has had to pay in terms of hardship and deprivation for the dubious privilege of pleasing international lending agencies and monetary authorities with this self-imposed exhibition of so-called "exchange discipline." In an economy where foreign exchange regulations abound, a strong case can be made out for opting for policy alternatives other than the devaluation of the currency.

Revaluation of the currency can assist in curbing inflationary pressures where it can be ascertained that exports will not be affected adversely and that other domestic measures can be taken to maintain the level of exports and their domestic prices. Revaluation need not be a remedy limited to recessionary times when domestic prices fall far below those prevailing at the international level. In determining the rate of exchange in a developing country which practises exchange control, great care should be taken to assess the impact on the economy as a whole as well as on its component sectors such as industry, agriculture, transport and communications, power, etc. The choice between a simple solution based on a low rate of exchange should not be given priority over a slightly more cumbersome package which involves a little more application of the human mind. For developing countries there are no straight and narrow paths to economic progress.

## **Pakistan's Exchange Rate Policy**

Pakistan did not devalue its currency in 1949 when all the member countries of the Sterling Area devalued their currencies in the wake of the Sterling devaluation. Pakistan's decision not to devalue was based on the argument of inelastic demand for exports of Pakistan. India, the major trade partner of Pakistan, refused to accept the new par value of Pakistan's Rupee, which led to suspension of trade between the two countries. Because of the Korean War boom, Pakistan did not face any immediate problems, but it became clear after the boom that it was difficult to maintain the then-existing par value. Consequently, the Pakistani

rupee was devalued in 1956 changing the par value from Rs. 2.80 per U.S. dollar to Rs. 4.76 per U.S. dollar. By the end of the fifties it was realised that Pakistan's exports of manufactured goods were not competitive in the world market. This led to the introduction of various export boosting schemes, particularly the Export Bonus Scheme. On the other hand, tariffs and quotas were used to restrict imports. Of the two measures, the quota was a more binding constraint. Later, imports were liberalised giving the market forces a larger part to play in determining the volume of imports. The liberalisation was brought about by allowing imports of certain products which were subjected to quantitative restriction, under bonus and cash-cum-bonus lists. The exports bonus scheme, coupled with the imports allowed under bonus, can be viewed as a selective devaluation. As more and more products were included in this list, the base for selective devaluation was broadened. But the selective nature of these measures led to serious misallocation of resources. Devaluation was resisted until May 1972, when the new par value was set at Rs. 11.0 per dollar. Following the devaluation of the dollar itself in February 1973, the par value of the Pakistani Rupee improved to Rs. 9.90 dollar.

The reasons given by the Finance Minister in May, 1972, for devaluing the currency were to end the flow of foreign exchange abroad, correct the misallocation of resources, curb uneconomic import substitution, foster competitive production check resource transfer from agriculture to industry, help the imposition of monetary and financial discipline in the economy and improve the balance of trade.

After more than three years of the devaluation decision it is clear that none of the objectives mentioned by the Finance Minister has been realised except for the one relating to checking the transfer of resources from agriculture to industry and there were other, better ways of bringing this about. On the other hand the country is bedevilled by unacceptable rates of inflation, the prevalence of monetary and financial indiscipline, a very substantial increase in the cost of production of almost all goods and services, and an undesirable trend in the allocation of resources. All these ills follow from the unfortunate decision favouring a massive devaluation of the Pakistan Currency in 1972. It is to be hoped that Prime Minister Bhutto's Government, which stands for a new and enlightened economic order, will soon reverse this decision so that, above all else, one ton of cotton or one ton of rice can buy more from international markets than the pittance which it now receives.

## **Financing of International Trade**

The financing of international trade is basically composed of two parts:

- i) The first consists of the means used by the exporter (supplier) to finance the production or procurement of the required supply, move it to the point of embarkation and then get it loaded on the transport vessel. The cost of insurance and freight may be borne by either the exporter or the importer. Again, in some cases the responsibility of the supplier is limited to delivering the goods alongside the vessel instead of loading them on the vessel.
- ii) The second part consist of the facility for paying for the goods extended to the importer (buyer).

The financial operations of the exporter can be met from his own resources or those of his organisation, but it is quite normal for a commercial bank to provide extensive financing facilities in the matter of exports. Actually in Pakistan banks are sometimes prepared to lend upto 80 per cent or even more of the value of the export order.

The financing arrangements of the importer are invariably made through banks and consist of bills of exchange or letter of credit. In the first place export and import price quotations clearly lay down all the relevant facts pertaining to the contract, such as price, quantity, specifications, date of shipment and mode of shipment, port of entry and necessary instructions regarding freight and insurance.

Bills of exchange are written demands executed by an exporter and served on an importer demanding the amount to be paid and the currency in which it is to be paid, as also the time by which it is to be paid. After the importer "accepts" the bill of exchange he sends it back to the importer after writing "accepted" on it and signing it. The exporter can then



present the accepted bill of exchange to the banking system and get it discounted. This means that the exporter can obtain an advance from the bank on the basis of the discounted bill, for which he pays interest at a stipulated rate and for the period when the accepted bill of exchange becomes due for payment by the importer. The funds thus advanced to the exporter depend on his credit rating and not on that of the importer.

Letters of credit are more popular than bills of exchange as the entire risk of payment by the importer in the latter case is borne by the exporter. In the case of a letter of credit the bank of the importer assumes the responsibilities for payment on behalf of the importer under the agreed conditions of the contract. The bank opens letters of credit on behalf of importers in return for a security which either varies from client to client or is determined by the Central Bank with a view to controlling the volume of various categories of imports. The margin (security) on letters of credit can vary from zero to 100 per cent of the value of the imports, depending on the credit rating of the importer and the commodity involved. Letters of credit can be revocable (liable to cancellation at any time prior to shipment), irrevocable (cannot be cancelled for as long as the letter of credit is available), and/or confirmed (in which case the letter of credit is also confirmed by a bank in the exporter's country). Letters of credit can also be transferable (the party in whose favour they are opened can transfer them to another party of its choice for fulfilling the contractual obligation), and further they can also allow part-shipments.

Governments and international banks also participate in assisting in the finance of international trade through the provision of short-term and medium-term loans on concessionary terms as compared to the prevailing national and international terms. These have been discussed in detail in the chapter on Money, Banking and Income Departments.

## **Export Promotion**

Just as an individual or a family must earn its keep so must a nation at some stage or the other earn its keep. It must ensure the provision of the wherewithal required to meet its current import requirements of goods and services as also to service and pay back the accumulation of past international debts. In short, every country must endeavour to promote its exports at least upto a certain minimum level which is sufficient to meet the obligations of the debit side of the balance of payments. The wise saying "Never a borrower or lender be" may not be wholly correct in the short-term but no one can dispute its relevance in the longer term.

Countries who popularise slogans such as "Export or Die" do so because their statesmen are imbued with a sense of self-respect and they do not wish to leave behind a heavy legacy of debt repayments on future generations. Nor indeed are they prepared to accept a lower level of economic activity which would result if the economy was required to make a downward adjustment consequent on low exports and low imports. Export promotion is, therefore, universally accepted as a basic function of government, and, wherever it exists, of the private sector.

International trade is subject to ruthless, and more often than not, cut-throat competition. In this respect it differs from domestic trade which enjoys a measure of insulation from foreign competition. Exports of any country, in order to be internationally competitive, must enjoy certain basic things.

Firstly, the products, (be it goods or services) should have quality and must conform to certain standard specifications. As Emerson has observed, if a man could make a better mousetrap the world would beat a path to his door. It should be emphasised that it is particularly necessary to maintain the quality of repeat orders, if not improve on them. The world in which we live today is a dynamic one and exporters would be well-advised not to content themselves with their past glories. Static quality in the long run means stagnating quality. The exporter should be well-versed in the technological innovations and consumer trends the world over in his particular line of business.

Secondly, the export price is a major factor in international competition. No brand name, however popular, can afford to price itself out of the market. On the other hand an export price based without any consideration of quality is equally meaningless. The price factor of various goods is related to the cost of the factors of production (inputs) that have gone into their production; if this is less in one country or a group of countries for a particular commodity then that country

or that group will enjoy a competitive advantage in terms of price as compared to other countries of the world for that particular commodity. Export prices should normally cover the cost of production but they may well be higher or lower than the domestic price in the light of international competition. Another aspect of prices is the currency in which it is quoted. It may well be that a foreign country may be prepared to pay a little more if the price is quoted in a "soft" currency as opposed to hard currency. A soft currency is one the supply of which exceeds its demand, that is, imports are more than exports and there are unspent balances of that currency. The balance of payments on current account of a soft currency is usually in deficit and exchange rates tend to move against it. A hard currency has the opposite characteristics.

Thirdly, the terms of export influence the ability to export. The terms of export generally relate of the period of shipment and the mode of payment. The period of shipment is sometimes a critical factor in influencing an export deal. Exporters who enjoy good reputation for meeting their shipping commitments do more business and on much better terms than those who do not enjoy a happy past record. Actually this reputation extends to the nation as such. Nations enjoying a high reputation for the quality of their products and adherence to an agreed shipping schedule can boast of much higher levels of export trade as compared to those which treat these matters on a different basis. The mode of payment to the exporter can sometimes be a trick problem. A country may have to compete with another which is prepared to provide short, medium or long-term credits for those very export goods and this would naturally place the latter in a more advantageous position. For instance, the U.S.A, Canada, Australia and France can afford to extend credits for their wheat exports. Pakistan could hardly expect to compete with them (when wheat production increases sufficiently to permit exports) if it offered to export wheat at the same price as the others but without extending a line of credit; obviously Pakistan would have to quote somewhat lower prices. Then again payments through letters of credit involve a greater burden on the importer as compared to bills of exchange, and this factor would have to be taken into account when two exporters quote for the same item, one demanding payment through a confirmed and irrevocable letter of credit and the other being prepared to accept a bill of exchange.

Finally are the group of organisational factors and promotion measures taken by Government and the private sector to build up exports. These include the organisation and management of the firm or group undertaking the export activity and its business capability and efficiency. Governments also provide invaluable assistance through research of foreign markets with reference to domestic capabilities and surpluses, through provision of technical assistance and export credit facilities, by organising fairs and exhibitions of domestic exportable goods in foreign countries, and by opening of trade offices abroad. In some cases a government directly canvasses and lobbies support with foreign Governments for a particular product, more so when the stakes are high. The sale in 1975 of the F16 fighter by U.S.A. to some Western European countries in preference to the french Mirage is a classic example of pressure exerted by a forceful Government to secure a large export order. The private sector, mostly through the Chambers of Commerce and Industry, supplements the export promotion activities of Government. There are also several cases of private firms trying to expand exports through advertising their wares in foreign market on a very large scale. Then there are the pressure lobbies of foreign firms working effectively through political pressures and the "right" intermediary.

## **Export Promotion in Pakistan**

Pakistan is one developing country which has invariably tried its level best to boost its exports and has not hesitated in using international organisations and bilateral foreign relations to augment its trade. An account of the export promotion measures as follows would indicate the extent of the endeavours made by Pakistan:

- (i) **EXPORT BONUS SCHEME:** The Export Bonus Scheme was introduced as from January, 1959 to increase the country's export by means of a bonus on export earnings. In the few years immediately prior to the inauguration of the bonus scheme, demand for foreign exchange clearly exceeded the supply at the official exchange rate. Thus a ration-

ing device, other than cost, had to function. This rationing device was government licensing of imports. The licensing authority had the task both of limiting the quantity of imports and of determining its composition. The bonus scheme made available foreign exchange outside the regular commercial licensing procedure. The bonus voucher then became a rationing coupon—like a regular commercial licence—which was required to obtain foreign exchange. The bonus voucher, unlike the commercial licence, was made transferable and marketable and therefore was rationed only by its price. When some part of foreign exchange was thus made available in the market its cost had to rise to the extent required to eliminate the excess demand. Given this excess demand for foreign exchange, its price was necessarily bid up once it was placed in the free market. This excess demand for foreign exchange exists because imports are so highly profitable under conditions of quantitative restrictions on imports. The high domestic profits associated with imports were, prior to the scheme, reaped by individuals fortunate enough to obtain licences. After the scheme, the profitability (or part of it at least) on imports against vouchers was captured by the exporter who earned the voucher. Indeed part of the logic of the scheme was to transfer the profits of importing to the exporter. The problem now is to explain the level of the premium.

The classification of commodities exported under different bonus rates was:

(a) **COMMODITIES EXPORTED UNDER 20% BONUS**

Pulses, Vegetable frozen, Molasses, Spices, Waste and used leather, Fur skins, undressed, Groundnuts green, Oilseeds, Fine animal hair, Cotton waste, Jute cuttings, Waste material of textile fabrics, Gypsum, Clay, Materials of animal origin, Plants used in Dyeing and Tanning, Resins, Blankets, Travelling bags.

(b) **COMMODITIES EXPORTED UNDER 30% BONUS**

Tobacco unmanufactured, Cotton yarn, Lace embroidered, Cotton blankets, Linen, Laces, Mosquito nets and Towels.

(c) **COMMODITIES EXPORTED UNDER 40% BONUS**

Chemicals, Canned vegetables, Bakery, Confectionery, Fruit preserved, Sea Salts, Prawns and Shrimps canned, Non-alcoholic beverages, Sugar and Syrups, Tobacco manufactured, Wool tops, Plants, Cosmetics, Polishes, Paper products, Table ware, Woollen Fabrics, Carpets, Cement, Machinery, Cotton cloth etc.

The rate of premiums of bonus vouchers varied from 80 to 180. On the demand side the pressures were influenced by the level of income, the amount of foreign exchange allocated by regular commercial licence for the importation of items included in the bonus list, the extent and effectiveness of price control on imported items, changes in the list of items importable under bonus or commercial licensing or both, and uncertainties about future import policies. On the supply side the availability of production depend on technological change and capital accumulation, and on whether some items were moved from the 20 per cent list to 30 or 40 per cent list.

Bonus earnings, that is, the share of foreign exchange given to exporters increased from Rs. 96 million in 1959 to Rs. 373 million in 1967 and stood at Rs. 3319 million in 1970-71. The scheme was discontinued in 1972 with the massive devaluation of the Pakistan rupee and its subsequent adverse ramifications on the entire economy. The Export Bonus Scheme really amounted to selective devaluation. But it served Pakistan well and gave a great impetus to industrial production and export promotion efforts by facilitating the supply of raw materials and machinery to industries under bonus imports.

(ii) **EXPORT MARKET DEVELOPMENT FUND:**

Selling in foreign markets is becoming highly specialised. Besides the need to offer goods of a reliable standard at competitive prices, success requires foreign market surveys and dissemination of information among interested exporters. Since most of the exporters cannot afford to undertake such a preliminary work, an Export Market Development Fund was created in January 1966. The Fund assist exporters through grants, the financing of projects relating to the survey of foreign markets for specified products and services, designing Pakistani products to suit the requirements of foreign buyers (one such centre has been opened at Karachi in cooperation with the Pakistan Council

of Industrial Design), opening of display centres, opening of offices abroad, dissemination of information relating to foreign markets amongst exporters through seminars, publications, films and other media. This fund also extends consultative marketing services to exporters, organisations and industries engaged in export trade. It also cooperates with international and national organisations engaged in activities relating to marketing of goods and services in foreign markets.

(iii) **TRADING CORPORATION OF PAKISTAN**

The Corporation was set up in July 1967 to implement barter agreements with Socialist countries and manage imports of some bulk items from other countries. The Corporation was paying attention mainly to the export of fine, medium and coarse rice. Rice has become the number one export item of Pakistan and a Rice Corporation has now been established.

The Corporation operates only as a commission agent and imports goods in bulk on Government account, allocating them to commercial importers and industrial consumers under Government directions.

The Trading Corporation of Pakistan has come in for a lot of criticism for making purchases and accumulating stocks in times of high prices to the detriment of the domestic buyer, buying sub-standard material, and for inordinate delays in providing supplies.

On the Government side TCP is defended on the following grounds:

- (i) TCP is playing a positive role in the field of exports, especially in helping the small manufacturers and exporters to find potential markets for their products and develop markets for non-traditional items. TCP also develops non-traditional markets for cotton yarn. Recently, it came to the rescue of the local textile industry by offering to purchase substantial quantities of yarn in order to improve the liquidity position of the textile mills. TCP's exports increased more than 10 times during the last two years i.e., from Rs. 1.4 crore in 1972-73 to approximately Rs. 15 crore in 1974-75.
- (ii) The main feature of the export performance of TCP was that the Corporation had been laying great emphasis on ensuring quality and regularity of supplies to foreign buyers, strictly in accordance with the terms of the agreements. This had generated considerable confidence in TCP's ability to fulfil its export commitments and an increased number of foreign buyers were now inclined to route their Pakistani imports through TCP.
- (iii) Referring to the effects of the international recession on TCP imports during the last two years, it is pointed out that there were substantial reductions in the sale prices of copper and M.S. billets at a considerable loss to TCP in order to enable the industrial consumers to compete with the competitive imports.
- (iv) The alleged delay in supply of goods was mainly because TCP's import activities were confined to suppliers in the tied resources under barter and credits who took their own time to make offers, and to effect shipment of goods.
- (v) It is said that the high prices charged by the TCP the prices are now related mostly to the actual purchase price or an average thereof if more than one consignment is involved.
- (vi) On TCP providing sub-standard goods it is said that all imports are made in accordance with U.S./ British or other accepted international standards or of the State Standards prescribed in the Socialist countries.

(IV) **COTTON EXPORT CORPORATION:**

The Federal Government decided to set up the Cotton Export Corporation of Pakistan in November, 1973, to handle cotton exports after nationalization. It was decided that both for desi and staple cotton exports the criteria should be international prices or the local prices on the date of offer/acceptance, whichever was higher, subject however to quality premiums and discounts. By and large, this arrangement worked all right so far as desi cotton was concerned. Since in the case of staple cotton the local prices were out of parity with the international prices, no export of staple cotton could take place right upto the last week of February 1974. Then, as a result of Government decision to arrange export of staple cotton on the basis of competitive international prices, irrespective of the local prices and/or New York Futures, the Corporation was

able to negotiate deals on international prices operative for different types at the time when individual deals were negotiated. The Cotton trade has done exceedingly well in the private sector. Thus far (mid-1975) the CEC has also done well but at a substantial cost to the national exchequer. It would probably be well to maintain competition between the public and private sectors.

(v) **RICE EXPORT CORPORATION:** The export of rice has been nationalised and all exports of rice are handled by the Rice Export Corporation. It is too early to judge its efficacy which would be really tested when the current international rice shortages are replaced by rice suppliers.

(vi) **TRADE PROMOTION INSTITUTIONS:** The Export Promotion Bureau and Pakistan's trade offices abroad constitute one of the most effective instruments of trade promotion. These keep the Government and trade posted with up-to-date developments in the field of international trade and commerce, survey foreign markets for Pakistani Products, report on the possibilities of introducing our goods abroad, help exporters in establishing contact with foreign importers, organise or help Pakistan's participation in fairs or exhibitions abroad, etc.

During 1974-75, the export promotion drive was accelerated by sending trade delegations to increase sales of Pakistani products through personal contacts and understanding and on-the-spot study of import policy, tariff structure, local tastes, designs, style, colours, fashion, specifications, etc. and to make the products accordingly. Six trade missions visited countries of the Middle East, East Africa, Sri Lanka, India, Western European countries, countries of South East Asia, Japan, the U.S.A and Canada. They included official and non-official members. Main commodities, covered by these delegations, included rice, raw cotton, dry fish, cotton textiles, fresh and dried fruits and a large number of other items.

In order to make the foreign customers aware of Pakistani products and to increase exports, Pakistan participated in 17 fairs and exhibitions in a number of countries. Most important of these were the Partners for Progress Overseas Imports Exhibitions, Berlin, held from the 28th August to the 2nd September 1974, the International Trade Fair of Sports Goods, Camping Equipment and Garden Furniture, Kolon (East Germany) in September 1974, "Leather Week", Paris, in September 1974, Internal Market for European Diffusion of Sub-Contracting Exhibition, Lille (France) in October, 1974, International Fair of Footwear, Leather Goods and Leather, Florence (Italy) in September and a number of other fairs held in Western Europe, Eastern Europe, Africa and the Middle East.

Several steps have been taken for the standardisation of export goods. The design centre set up at Karachi with the technical assistance of the Government of Switzerland guides the exporters in designing their products for overseas markets. Standards have been specified for 27 manufactured export items mainly electrical goods and non-electrical machines by the Pakistan Standard Institute. Similarly, more than 11 agricultural commodities are graded before shipment by the Agricultural Marketing Adviser. For other export items, pre-shipment inspection is made by the trade bodies. An exporter is punished under the Export (Quality Control) Order, 1973, in case he indulges in malpractices.

(vii) **EXPORT AND IMPORT POLICIES:** These have been traditionally powerful instruments for export promotion and they are generally announced once every year or once in six months. The main strategy adopted to achieve export targets is, firstly, to expand production of exportable goods, both in agriculture and industry, and to adopt appropriate measures to accelerate investments in export industries and increase productivity and output.

Secondly, to reduce dependence on a few traditional markets, by seeking new markets, particularly in developing countries, and increasing exports to centrally planned economies.

Thirdly, to diversify exports, by increasing the export of manufactured products and promoting export of new agricultural products.

Fourthly, to seek, through bilateral negotiations and participation in International conferences, a greater access for our export commodities, in the markets of the developed countries of the world.

Fifthly, to establish and maintain a reputation for reliability and quality for Pakistani products exported abroad.

The import policy is also export and production oriented and gives first priority to industrial raw materials, spares and machinery for the production process related to the export and import substitution sectors. Actually an attempt is made to harmonise import policy with the annual development programme, the budget, price stabilisation and export targets. The highlights of the import policy announced in June 1975 were:

- I. Liberal trend of the past four years has been maintained.
- II. The import policy will include a three-part free list, mostly covering industrial raw materials, spare parts and machinery.
- III. The policy also has a tied list with importable items to be financed from barter and credits.
- IV. Cash financed import ceiling for machinery for balancing, modernisation and replacement raised from Rs. 5 lakh to Rs. 7.5 lakh.
- V. The ceiling for credit financed imports for modernisation, balancing and replacement raised to Rs. 15 lakh.
- VI. Higher ceilings will also be available to the private sector in respect of construction and engineering, drilling and boring equipment.
- VII. Ball bearings have been put on the free list.
- VIII. Power tillers will be importable by the public sector only, and go to the free list.
- IX. Art silk quota reduced from 400 to 300 lb per loom per quarter.
- X. Importer by the Trading Corporation of Pakistan, especially for the public sector, will be streamlined to conserve foreign exchange and to prevent building up of unnecessarily large inventories.
- XI. Despite "tremendous pressure" on foreign exchange resources a liberal trend of imports will be maintained in order to expand productive capacity and boost production for domestic use and for exports.
- XII. Free import of large number of raw materials and spare parts is being kept up.

With the announcement of every import policy there are a series of protests from either a group of importers or from some industrial groups. More often than not there is substantial merit in these protests and sometime they are effective enough to secure a change in policy.

(viii) **FISCAL MEASURES:** Export duties, import duties on industrial raw material and spares used in the production process of export goods, and other tax incentives are used with varying success for export promotion. In order to overcome the problems created by the recession in the Western countries, export duties on cotton and cotton manufactures were reduced on the 8th June, 1974. To maintain the export level of cotton textiles in the face of a declining demand, export duties were abolished on the 1st August, 1974 on grey cloth, finished cloth, cotton cloth bags, finished towels, cotton hosiery, cotton thread and canvas/cloth (grey or white). On the same date, the export duty on fish meal was also removed. On the 18th August, 1974, the export duty of 20 per cent *ad valorem* with extra duty of 40 paisa per lb applicable on yarn of 21 to 24 counts was abolished. This was followed by exemption of cotton yarn waste on the 19th August, 1974. On the 3rd September, finished leather and leather shoes were exempted from export duty. On the 30th October, 1974, the excise duty on cotton yarn was reduced by 60 paisa per pound. The Federal Government gives a liberal income tax rebate on profits accruing from export business. Similarly, a rebate of customs and excise duties are allowed in respect of raw materials used in export items. Liberal credit facilities are also provided to exporters, especially on non-traditional items like capital goods and when exported on credit for a long time. Import licences are issued liberally to the exporters of manufactured goods, including necessary quantities of some of the banned items.

The government occasionally creates problems which can have far-reaching ramifications on export markets. During the Commodity boom in 1972-73 the then Finance Minister levied an export duty on yarn and made in retroactive even for those exports for which letters of credit had already been opened. This was contrary to normal international practice and the Japanese protested vehemently but unsuccessful, and for quite some time thereafter they would not buy from the Pakistan market.

(ix) **BARTER TRADE** : Barter trade is mostly conducted with the Socialist countries which are rigidly centrally planned economies. Pakistan's long standing problem of a favourable barter balances has been finally resolved. A favourable balance of 7.5 million on the 1st July 1974 was converted into an import surplus of \$14 million on the 31st March, 1974. The barter exports during the first eight months of 1974-75 were only 6% of total exports. Trade with some Socialist countries outside the barter has increased sharply. During 1974-75 Pakistan renewed existing agreements with China, Hungary and Czechoslovakia and concluded barter agreements with the USSR, North Korea and East Germany. The agreement with China provides for a trade turnover of Rs. 19 crore annually each way. Pakistan will be importing pig-iron, billets, coal and coke, textile machinery etc. from China and exporting cotton and its products. The Chinese Minister for Foreign Trade visited Pakistan in January 1975, and a Pakistani delegation visited China for machinery. A fresh barter trade agreement was signed with the USSR in January 1974.

Under this agreement Pakistan will import urea, pig iron, steel billets, zinc, tractors, equipment for oil and gas exploration, TV sets, plate and sheet glass, and tyres. Pakistan will export raw cotton, hosiery, readymade garments, leather footwear, cotton textiles, towels, bedsheets, and sports goods. The USSR has agreed to extend a credit of Rs. 230 crores under which equipment and machinery will be imported for the Karachi Steel Mill. Under the agreements, a part of the repayments are to be made through the export of goods to the USSR.

In 1974, Pakistan and East Germany signed their first barter trade and Payments agreement. In this agreement clearing arrangements have been explained and no ceiling on exports and imports has been fixed.

## **TRADE AGREEMENTS WITH OTHER COUNTRIES**

In order to stimulate exports to the Middle Eastern countries and Africa, a number of trade agreements were signed with them during 1973 and 1974. The most important development was the accelerated negotiations between Pakistan, Iran and Turkey for increasing their trade under the RCD. In order to increase the trade among the member countries on permanent basis a study was prepared by the UNCTAD to identify barriers in the way of trade in 1970. Since then, several meetings had been held to implement the recommendations of the UNCTAD. The last meeting of the Expert Group was held in April 1973. The Report was again considered during the 17th Session of the RCD Committee on Trade in November 1973. In the beginning of 1974, a trade agreement was signed with Iran under which Pakistan would supply rice worth Rs. 50 crore to that country. Under another arrangement, Pakistan is likely to start importing railway locomotives from Turkey. A trade agreement based on most-favoured-nation treatment (MFN) was signed with the Sudan in June 1973.

A number of trade agreements were signed with Saudi Arabia, Kuwait and some other Persian Gulf States for increasing the exports of rice and other consumer goods and imports of petroleum products which are in short supply in the world market.

## **ARRANGEMENTS WITH EUROPEAN ECONOMIC COMMUNITY**

Pakistan is expected to export 16000 metric tons of textiles to the European Economic Community (EEC or Common Market) during the next three years, beginning 1976, under the new arrangements finalised by the Government.

The new arrangement, under the GATT's Multilateral Multifibre Textile Trade Agreement, will be valid for 1976, 1977 and 1978. It raises the export quota from the previous level of 13,000 tons a year to 16,000 metric tons annually. (GATT stands for the General Agreement on Tariff and Trade).

The export quota assigned to Pakistan will include cloth, household goods and cotton fabrics.

Pakistani exporters will now have to make arrangements for utilising the full export quota to the Community, as in the past part of the quota remained unutilised. The previous utilisation of quota was estimated at around 75-80 per cent a year.

## “PAY AS YOU EARN” SCHEME

The “Pay as You Earn” Scheme, was introduced by the author about 23 years ago when he was in the Ministry of Industries. It authorises people to establish export-oriented industrial capacity on the basis of imported machinery which is then paid for out of a fixed percentage of the exports of that particular industry. The scheme has been an unqualified success in Pakistan.

## Barriers to international trade and Payments

The Theory of Comparative Costs amply demonstrates that a world free of man-made obstacles to trade will provide the optimum allocation of factors of production the world over and will maximise international economic welfare. Despite this there is no government which permits the free movement of all goods and services into and out of national frontiers. Of course some countries follow a more liberal policy than others. Constraints on trade are placed through a number of restrictive devices in order to achieve certain national objectives. The main barriers to international trade and payments can be grouped as follows:

- (i) tariffs;
- (ii) quantitative restrictions;
- (iii) exchange control;
- (iv) the problem of protection;
- (v) state trading;
- (vi) cartels;
- and (vii) commodity arrangements.

**TARIFFS** impose a customs duty (import duty or export duty) on merchandise crossing national boundaries and thus discourage imports and exports, as the case may be. Tariffs are thus a schedule of duties imposed on imported or exported goods, either for revenue purposes or for protecting domestic production. In addition there are transit duties imposed by a country on goods passing through its territory, although the ultimate destination is a third country. Duties can either be specific (related to quantities) or *ad valorem* (related to value). *Ad valorem* duties are generally imposed on manufactured goods while specific duties are imposed on standardised and staple products, but this may not always be the case. The landed cost of a dutiable import would always be higher than the import price by at least as much as the amount of duty paid. This could create serious problems for export-oriented industries which have substantial requirements of imported raw material and spares. The problem is sometimes resolved by permitting imports on a duty-free basis when they are designed for re-export or by refunding (in the form of a drawback) the duty paid on the import component of a domestic product.

The average rates of import duty in Pakistan are as under:

TABLE 19.13

*Average Rates of Import Duty Classified by End-Use in Pakistan*

Commodity Group	1955-56	1965-66	1974-75
(i) Essential non-durable consumer goods	35	70	64
(ii) Semi-luxury non-durable consumer goods	54	148	155
(iii) Luxury non-durable consumer goods	99	180	187
(iv) Unprocessed raw material for consumer goods	26	39	35
(v) Processed raw material for consumer goods	43	81	60
(vi) Unprocessed raw material for capital goods	23	40	34
(vii) Processed raw material for capital goods	38	69	97
(viii) Consumer durable goods	71	114	183
(ix) Machinery and equipment	14	34	44

*Source:* Pakistan Development Review and Central Board of Revenue.



Table 19.13 indicates that over the years the average rate of tariffs on imports has continued to increase and this has doubtless discouraged an increased flow of imports, apart from the substantial revenues earned for government.

Export duties are designed to either discourage exports in order to satisfy domestic requirements more fully or to provide government with windfalls of additional revenue in times of boom. Export duties can only be levied when the exporter is able to compete in international markets even after payment of the export duty. In Pakistan export duties are generally levied on rice, cotton, cotton yarn and cotton textiles.

QUANTITATIVE RESTRICTIONS are the most effective instrument of regulating both imports and exports. Unlike tariffs they impose absolute quantitative limitations on foreign trade and prevent the market from making any response to changes in domestic and foreign economic trends. Quantitative restrictions are generally imposed when a country faces a balance of payments crisis on current account or when it wishes to provide really effective protection to a domestic industry. On the import side Pakistan has three lists as of mid-1975: a free list covering mostly industrial raw materials and spare parts which can be obtained from anywhere; a tied list in which some imports are restricted to certain countries like Turkey and the Socialist Countries; and a licenseable list under which import licences are issued on a restricted scale. It should be mentioned that quota separate the domestic market from the world market and give rise to monopolistic quota profits.

Exports are also subjected to quantitative restrictions for the purpose of preventing strategic goods being sold to unfriendly Powers, ensuring domestic availability of certain goods and services, and preventing domestic surpluses from upsetting international trade and price stability in these items. Export control and production control sometimes go hand-in-hand to improve the market and prices of certain raw materials like crude oil, wheat, rubber, tin and sugar.

EXCHANGE CONTROL implies that some authority in the country, generally the Central Bank, determines the uses and availabilities of foreign exchange. In fact direct governmental interference replaces the free operation of the foreign exchange market. The basic idea is to conserve scarce supplies of foreign exchange and gold and to utilise them for the import of goods and services that fit into some priority pattern in accordance with the objectives of national policy. Exchange Control is administered for attaining one or more of the following objectives:—

- (i) to prevent a deterioration in the current account balance of payments situation by restricting imports;
- (ii) to prevent illegal transfers of money abroad through under-invoicing of exports and over-invoicing of imports (in Pakistan this function is entrusted to specialised cells in the State Bank of Pakistan);
- (iii) to facilitate national economic and social planning;
- (iv) to protect domestic industries by restricting imports of goods and services that would hurt domestic production;
- and (v) to earn revenue for government by buying foreign exchange at a lower price and selling it at a somewhat higher price.

In Pakistan, Exchange Control restrictions are exercised with great vigilance and care by the State Bank of Pakistan and the illegal inflow and out-flow of money has been reduced to the probably irreducible minimum. Of course this remark does not apply to smuggling which, according to bazaar gossip, continues to thrive.

Exchange Control forces international trade into bilateral channels and disrupts multilateralism, which should really be the basis for international trade. Bilateralism creates blocked balances and scarcities of convertible currencies. This eventually leads to the negotiation of bilateral payments arrangements in order to liquidate blocked balances. Exchange Control also leads to a redistribution of incomes, the nature of which depends on the extent to which the system provides monopoly profits for the government, exporter and importer. Exchange Control prevents international specialisation and trade in accordance with the doctrine of Comparative Costs. The system can also nurture corruption amongst the officials who administer it. For developing countries, however, exchange control is a must and it will indeed be many years before it can be dispensed with.

**THE PROBLEM OF PROTECTION** of domestic industries has been under active consideration ever since the end of the 18th century. The case for free trade (as against protection) rests on the theory of international specialisation and comparative costs. It is sometimes argued against protection that the denial of the advantages of international trade can only stem from ignorance or misguided nationalism in blatant disregard of the overall national welfare.

We have considered so far the case when Protection takes the form of tariffs for export subsidies. Developing countries, however, also apply other policy instruments to protect their domestic industries. Among measures that directly affect the protection of particular activities, we can distinguish "price" and "nonprice" measures. The former include *ad valorem* and specific tariffs, import surcharges, advance deposits for imports, and multiple exchange rates; the latter comprise quotas, licensing, and exchange controls. In an indirect way, the extent of protection is also affected by other types of policy measures, such as profit taxes, credit policy, and social security arrangements.

The main argument for protection is the "infant industry" argument. Other arguments favouring protection which relate to national security and diversification of the economy for securing a certain measure of economic stability. These also enjoy some rational basis. The other arguments advanced in favour of protection are either questionable or indeed fallacious. These arrangements relate to employment, terms of trade, international bargaining and retaliation, anti-dumping, and low-wage competition.

Let us first examine the **infant industry** argument. The infant-industry argument is associated with Alexander Hamilton, the first Secretary of the Treasury of the United States and Frederick List, a German economist who lived in this country as a political refugee. Alexander Hamilton published his famous Report on Manufacturers in 1791. Urging the use of tariffs to foster the growth of manufacturing and to strengthen the American economy which was then predominantly agricultural, he contended that the vast resources of the country could be advantageously developed to compete with foreign industries holding a vast lead due to a prior start. Even though time and ingenuity could ultimately bring about such a development, governmental aid and promotion would speed up the process; that the need for governmental assistance would constitute only a temporary departure from the free-trade doctrine in order to bring about a speedier, more secure, and steadier demand for the surplus produce of the soil.

Frederick List's historical approach to the question of free trade versus protection led him to the general conclusion that free trade is a cosmopolitan concept that is not necessarily in the best interest of a country in an intermediate stage of economic development. Such a developing country could not readily develop new industries without temporary protection—a view held by the more modern framers of the General Agreement on Tariffs and Trade (GATT).

As Dr. Root points out the real problem of the infant-industry argument does not lie in its theoretical validity, but rather in its practical application, for it is almost impossible to distinguish in advance the exact nature of a new industry and whether or not it will become competitive. Moreover once a new industry is protected, the pressure from vested interests prevents the removal of protection, especially when the new industry proves to be incapable of ever becoming self-sustaining. Whatever the theoretical basis of the infant industry argument, the facts of life are that all developing countries and centrally planned economies and most developed countries will be living with it for long years to come.

In Pakistan domestic industry is, generally speaking, provided substantial support based on the infant industry argument. Now and then trading interests do get the better of industry, but by and large Pakistan industry cannot complain. Besides comparative cost, adequacy of domestic demand, adequacy of installed and planned capacity to meet expected demand, the Pakistan Tariff Commission devotes considerable attention to the problem of quality of indigenous products. It undertakes detailed technical investigation as well as making enquiries to the users of the product. The Commission attempts either to be satisfied with the quality of the product before it recommends protection or suggests measures for improvement of quality and makes adoption of such measures a condition for the grant of protection. This is particularly true in the case of intermediate and capital goods industries.

While generally attempting to fix tariff rates and other concessions or protective measures in such a manner as to offset the specific cost disabilities of the industries in question, the Pakistan

Tariff Commission goes into the examination of the specific causes of cost disabilities of particular industries. The cost disadvantage or disability of Pakistan industries are usually due to (i) absence of an adequate infrastructure, high cost of power, and transportation and communication facilities, absence of ancillary services and industries and (ii) lack of experience of management and of labour in acquiring skill and mastery over technique. These two items constitute the infant industry argument.

The cost disadvantage can also be due to the limited size of the market and inability to realise economies of scale which have been discussed above at length. Moreover, there may be the particular cost disabilities of the industry in question such as the high cost of the specific labour required for the industry, high cost of materials, high overhead costs or high selling and distribution costs. A particular industry may also suffer from a relative inefficiency of its particular management. The Tariff Commission seeks to compensate for the cost disadvantage arising out of all the factors except that it does not fully compensate for high overhead costs, selling and distribution costs and market size but only to the extent that the Tariff Commission thinks that these disabilities can be overcome only after a time lag. The author had, while serving in the Ministry of Industries in the early sixties, introduced the principle of price preference for domestic production, so far as supplies to governmental agencies were concerned. The extent of price preference was based on the element of saving in foreign exchange in relation to the imported product. The higher the percentage of saving in foreign exchange the higher the price reference. The idea was to encourage import substitution but only at a price which had direct relevance to the saving in foreign exchange.

The **National Security** argument does enjoy a limited measure of support from most patriotic people despite the economic sacrifices that may be entailed in the process of enjoying a measure of national self-sufficiency in certain essential industries for national defence. It is a wasteful use of scarce resources especially for a developing country (actually for all countries) in peacetime. Stockpiling of an efficient arsenal of effective defence material acquired from friendly sources can be a suitable substitute for national defence production even if the foreign exchange expenditure involved in foreign purchases requires substantial sacrifice. In this way a nation at least acquires worthwhile equipment at a reasonable price instead of supporting an inefficient and high cost domestic production. National security is difficult to define in concrete terms and is subject to far greater vicissitudes of fortune than the most volatile group of primary commodities. Since producers of defence equipment regard themselves as the guardian angels of the nation they are inclined to consider their activities essential to the security of the country, and thus the national security argument leads to all sorts of abuses.

The argument for **diversification of the economy** with a view to providing economic stability warrants sympathetic consideration. This argument is closely related to the infant industry argument, but it applies more specifically to countries that are heavily engaged in the production of one or a few agricultural or mineral products. These so-called one-crop countries may lose heavily if there is a crop failure or a drop in world demand for their few products. It is easy to sympathize with the desire of one-crop countries to diversify their economic activities to free themselves from overdependence upon outside sources even though it may be uneconomic to do so.

A case is sometimes made out for protection by using the **employment** argument. Other variations of this argument are to keep national expenditures within the country as far as possible so as to promote domestic economic activity and create more jobs at home. It is argued that the imposition of a tariff or some other form of import restriction in periods of unemployment will reduce imports and generate increased home production. Increased domestic production in turn will increase employment and national income. Since import expenditures, like savings, create a leakage in the domestic income stream that is further magnified by the effect of the foreign trade multiplier, the reduction of imports will tend to generate an even greater measure of domestic expenditures and employment. This argument carries tremendous appeal in periods of depression and especially under conditions of less than full employment in the domestic economy.

A close examination of this argument reveals several flaws. Curtailment of domestic imports reduces the availability to foreign countries of foreign exchange that is needed in payment for domestic exports and, in time, tends to decrease those exports. A small country may successfully combat unemployment by decreasing its imports if other countries do not retaliate. Major countries that resort to this method would tend to spread unemployment abroad, since one country's imports are other countries' exports, and all countries cannot possibly reduce imports and maintain exports at the same time. The net gain in employment, if any, may be only temporary since other nations will most likely adopt counter-measures in self-defence. A policy of protection designed to alleviate unemployment is, therefore, likely to result in no more than a shift of employment from the more productive export industries to the less efficient import-displacing industries.

The **terms of trade** argument for protection asserts that higher tariffs will force a reduction in the price of imports. Foreign suppliers who are faced with a falling demand will cut the prices of their goods in order to maintain sales in the tariff-levying country. In this way the same amount of foreign exchange will buy more imports, that is, the tariff country's terms of trade improve. Of course a country that imports a significant proportion of a product, the supply of which is inelastic, may very well succeed in forcing the world price of its imports downward and may alter the distribution of the world income in its favour, thus improving its terms of trade. But no single importing country is a major user of any particular commodity. It should be remembered that any step away from the full economic benefits of international specialisation is a step toward less efficient production and is, therefore, a negative step unless justified on other grounds.

The bargaining and retaliation argument postulates that a country with a protective tariff is in a better position to bargain with other countries for concessions on its exports than is a country that has nothing to offer in return. It follows, therefore, that a free trade (or low tariff) country should adopt some form of protection in order to be in a bargaining position. The logic of this argument is strong and such a policy may work out in actual practice. It does not, however, necessarily follow that the argument has economic validity. A free trade country that resorts to protection for the purpose of bargaining sacrifices the benefits of international specialization on its imports, in addition to losing the benefits on its exports by foreign tariff action. Furthermore, once protection is introduced, domestic industries develop behind its shield and become entrenched, exerting pressures upon their government when the time comes to give up such protection.

The **anti-dumping** argument favouring protection enjoys popular support, despite the fact that the dumping of goods in an importing country at prices below those prevailing in the exporting country may be beneficial or harmful depending upon circumstances. If dumping is persistent, buyers in the importing country reap a continuous benefit that results from lower prices for foreign goods. If the importing country has no domestic industry competing with the dumped product, there is, of course, no argument for protection. If, on the other hand, such an industry exists, domestic producers are in no different position than if the dumping price resulted from a normal cost advantage in the exporting country. The fact that there is an element of unfairness to domestic producers in the situation is not a valid reason for protection since the nation as a whole is benefited. When dumping is sporadic and is intended to harass and to put a competing domestic industry out of business in order to raise prices afterwards, dumping becomes undesirable. To prevent such predatory dumping action is necessary.

The **low wage** argument is a favourite one of the developed countries whose protections claim that a high wage country cannot afford to trade with low wage or "pauper-labour" countries without risking a reduction in its own wages through competition with the low foreign wage level and thereby jeopardizing its standard of living. They assert further that, to protect its workers from the competition of low-paid foreign workers, a high wage country must impose a tariff duty on cheap goods that are imported from the low wage countries.

This sort of reasoning discloses a complete misunderstanding of the cause and effect of price and wage determination. The cost of a product is not the result of the cost of any one factor of production labour, in this instance—but the result of the sum total of all the factors used in its

production, namely, land, labour, capital, and management. There is, therefore, no guarantee that a low cost labour input is cheap in terms of output is its productivity is, in comparison, lower than that of a higher cost labour input.

Before passing over the subject of protection it would be well to remember that the persistence of protection, even when it is no longer necessary stems from the groups whose interests are directly at stake and who pressure their representatives in government for executive and legislative action which is favourable to their immediate interests.

## WEAPON OF ECONOMIC WARFARE

**STATE TRADING** can be a highly effective barrier to the development of international trade. When a government engages in actual commercial operations, directly or through agencies under its control, either to the exclusion of or in addition to private traders, it is said to practice state trading.

The institution of a state-trading system affords the government monopoly powers that may be used to regulate international trade far more effectively than tariffs or any of the other measures of control we have studied so far, with the possible exception of foreign exchange control. These powers are inherent in the system itself when the state becomes the exclusive buyer and seller of a given commodity. The imports and exports of a country may thus be timed and directed unilaterally to achieve discrimination between different nations or to exert economic pressure to exact political advantage. The state may even choose to ignore cost and price relationship in order to realize its end in the process.

**When so utilized, state trading constitutes the ultimate weapon of economic warfare and a tool for good or evil at the discretion of the state.**

Theoretically, commercial transactions may be carried on by the state and by private enterprise either in conformity with or in contradiction of the basic principles of international trade and comparative advantage. In practice, private enterprise is more likely to be influenced, by, and conform to, market forces in order to insure profitable operation and economic survival. The state, on the other hand, may ignore the profit motive for political considerations; and the tremendous powers centred in the government may be ill-advised, misdirected, or even misapplied. The resulting distortion of the market leads to a poor utilization of the resources of the world, particularly those of the state-trading country. Furthermore, whatever discrimination may develop is likely to create ill-feeling and concern abroad and to give rise to retaliation that jeopardizes international efforts toward trade liberalization.

State trading can really be justified only when domestic planning programmes are being disrupted by outside economic forces; accumulated surpluses under price-support schemes have to be disposed of; large-scale purchases can obtain more favourable prices and terms; when items which are in short supply nationally and/or internationally have to be obtained; and for acquisition of strategic materials.

State trading is practised by countries as far apart as Russia and China on the one side and the U.S.A. and U.K. on the other. Actually in all centrally planned economies, with the solitary exception of Yugoslavia, state trading is the order of the day. The U.K. practices state trading on a fairly large scale in respect of its nationalised industries. Even the U.S.A., that great bastion of free enterprise, indulges in state trading for the disposal of surplus agricultural products accumulated through its price-support programme, for acquiring strategic materials, and for off-shore procurements to supply its foreign military bases. In Pakistan the Trading Corporation of Pakistan, the Cotton Export Corporation, and the Rice Export Corporation are the main state trading institutions.

**CARTELS** are deterrents to specialization and trade because their fundamental objectives are the control over prices, markets, supply, and technological changes. Cartels are out of favour not only for interfering with free competition and public policy, but even more because they

“...favour the rich against the poor, large corporations against the small, producers against consumers. It is rather that, in its ultimate tendencies, cartelization is restrictive of much more than just freedom to compete. By interfering with freedom of access and

entry, cartelization at the same time interferes with expansionist influences in the determination of output, capacity and survival of the fittest producers. It is this inclusive and far-reaching restrictionism which is so thoroughly inimical to the national interest." (Whittlesay: "National Interest and International Cartels").

The control of international cartels can be successfully undertaken only by concerted action that is based on full international cooperation by the participating countries. The divergent national viewpoints regarding the necessity for such action and the complexity of the problem of effective enforcement, however, render unlikely any subjection of cartels to international regulation and control in the foreseeable future.

Even though the control and/or regulation of international cartels since World War II attest to some progress, this has been confined to national measures, except for the EEC where it is regional and by no means international in scope and effect.

COMMODITY ARRANGEMENTS, or inter-governmental commodity agreements, are arrangements between leading producing countries or between leading producing and consuming countries to control and regulate production, prices, international trade, and certain marketing practices of specific primary commodities, such as wheat, cotton, coffee, rubber, and tin. In the past there also have been international commodity agreements between private producers, with or without government participation. Commodity agreements are similar to cartels, since they are generally concerned with the control of production and experts to stabilize or raise prices. Most inter-governmental commodity agreements tend to be arrangements between consuming as well as producing countries. They are initiated by governments or by private associations that seek governmental sponsorship and support to widen market coverage, to strengthen control, and to ensure compliance. The participation of consuming countries is intended to safeguard the interests of all concerned and to ensure cooperation that will enhance the ultimate success of these agreements. Unlike cartel arrangements, which protect the interests of a few already large and influential producers, inter-governmental commodity agreements seek to protect the interests of consumers as well as those of a large number of generally small producers who cannot individually influence the market by their separate actions.

The need for organized action regarding certain primary products is due mainly to the fact that the supply of and the demand for these products are highly inelastic, relative to price changes. As a result, a rise or a fall in price will bring about only a slight change in the quantities supplied or demanded, causing wide and erratic price fluctuations. The price mechanism in a competitive market, therefore, is inadequate since it does not satisfactorily perform its equilibrating function. Moreover, higher prices induce individual producers to expand production in order to increase income and profits while price deterioration may also induce producers to increase production to maintain income. Surpluses that accumulate distress the market. The value of exports declines, especially in countries that are heavily dependent upon agricultural and extractive industries; and purchasing power declines, reducing imports. In this process international trade suffers and the distressed local conditions soon become an international problem.

When such conditions develop, producers may form a private raw material cartel to deal with the situation. Since cartels usually try to set high prices, however, they encourage expansion of production by outsiders without materially reducing the capacity of their members. Moreover, cartels do not usually possess the necessary financial resources to withhold existing surpluses from the market. This sometimes induces a few of their members to break away from their allotted quotas for economic survival; thus the very foundation of the cartel is threatened. Experience has shown that private cartels in primary products are inadequate to deal with the situation, especially when excess capacity is at the root of the problem. Consequently, the state is often induced to take a hand in support of a private cartel or to resort to independent unilateral action. In either case, the benefits of competition and free enterprise are likely to be sacrificed to the immediate necessity of economic relief to alleviate existing distressed conditions.

The subject precluding international Commodity arrangements with reference to a wide range of primary commodities is the pressing demand of the NEW ECONOMIC ORDER.

This would provide for a fair, just and equitable relationship between the prices of primary products and manufactured goods and would enable a substantial redistribution of world income in favour of the less privileged nations. There seems to be a community of interest on this subject between the Third World (including the oil producers), the centrally planned economies, and also some developed countries like France and Sweden. The U.S.A., as of mid-1975, has also accepted the principle of a simultaneous dialogue on oil and other raw materials. The whole idea has now gained international respectability and there should be an effective international solution to the trade problems associated with raw materials in the not too distant future.

## Trade problems of developing countries

The trade problems of developing countries are typical of the economic and social conditions which prevail in these countries. Their per capita income is low, their rates of illiteracy are high, agriculture and other primary production is the mainstay of their economies, and they are, by and large, dependent on commodity exports. They include all the non-Communist countries of Asia (with the exception of Japan), South America, and Africa (with the exception of South Africa). Almost 70 per cent of the people in the non-Communist world, which constitute the developing countries, live a life of poverty and there was no option for them but to build up a concerted programme of economic development that would break the vicious circle of poverty. Industrialisation became a dominant national goal but in recent years agriculture has also been given its rightful pride of place. It is this drive for economic and social development which determines the policies and attitudes of the developing countries in the field of international trade.

The foremost trade problem of the developing countries (barring the oil producers) is the huge trade gap. The UNCTAD meeting of 1964 estimated that the gap on current and capital account of developing countries would be 11 billion dollars in 1970 on the assumption that the flow of public and private funds follow the same trend in the sixties as it did in the fifties. Developing countries attempt to eliminate their trade gaps by increasing their exports. This in itself is no mean problem because, in order to increase their exports, they have to increase production and for this they have to find the finance for the imports need for economic growth. The increase in economic activity not only increases the pressure on imports but it also reduces the amount of exportable surpluses by diverting a part of these supplies to the domestic market. There are also other powerful factors which operate to the disadvantage of the developing countries in imposing limits on their expansion of exports.

According to the UNCTAD meeting held in 1964, the 151 percent growth in the exports of the developed economies between 1950 and 1962 was accounted for by an increase in the quantum of exports of 112 percent and a price increase of 19 percent. On the other hand the exports of the developing countries increased only 50 per cent, which was less than the 57 percent increase in the quantum of their exports, due to a price decline of 4 per cent. The same UNCTAD study also indicated that in this period the imports of developing countries increased much more than their exports in this period; the increase in the quantum of imports was 67 percent, of which 8 percent was attributable to an increase in prices. The increase in the volume of their imports relative to their exports along with the 12 percent deterioration in their terms of trade cause a marked worsening in their balance of trade with the rest of the world; in 1962 they had a deficit of \$29 billion. The 12 percent deterioration in the terms of trade caused the developing countries a loss of \$16.7 billion which was almost one-third of the net flow of long-term capital and grants given them between 1950-62 (45.9 billion).

We can discern a long-term trend in international trade which works to the disadvantage of the developing countries as their share in world exports has been stagnant.

TABLE 19.14

*Shares of Developed and Developing Countries and Centrally Planned Economies in World Export*

## Percent of World Exports

Year	Developing Countries		Centrally Planned	Developed Countries
	* Major Oil Exporters	— Total		
1938	..	6	25	10
1948	..	6	30	7
1950	..	7	32	8
1951	..	7	29	8
1952	..	7	26	9
1962	..	7	21	12
1965	..	6	20	11
1968	..	6	18	11
1970	..	6	17	11
1971	..	6	17	10

\*Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Netherlands, Antilles, Nigeria, Saudi Arabia.

Source: United Nations. International Monetary Fund.

Again a study of World exports from 1955 to 1970 will indicate that in this period petroleum exports increased 3 times and those of manufactures more than 5 times, while the exports of primary commodities which are the mainstay of the developing countries just about doubled. Table 19.15 brings this out rather vividly:

TABLE 19.15

*Trend in World Exports of Manufactures, Petroleum and Primary Commodities, 1955-70*

(US \$ billion)

Year	Primary Commodities		Petroleum	Manufactures
1955	..	31.1	8.6	33.8
1956	..	33.5	9.7	43.8
1957	..	34.7	10.8	48.2
1958	..	32.0	10.4	46.5
1959	..	34.0	10.0	50.3
1960	..	36.7	10.6	57.7
1961	..	37.1	11.2	61.3
1962	..	37.7	12.2	64.9
1963	..	41.1	13.1	71.2
1964	..	44.8	14.2	81.9
1965	..	46.0	15.1	92.5
1966	..	48.1	16.4	103.9
1967	..	48.5	18.4	111.0
1968	..	51.2	20.4	128.4



1969	..	55.2	22.1	151.7
1970*	..	62.7	25.5	174.7

Note: Data exclude all trade with and between countries with centrally planned economies.

\*1970 figures are provisional.

Source: United Nations.

A comparison of the exports of primary commodities and manufactures from developing and developed countries provides an interesting study.

TABLE 19.16

*Value of Primary Commodities and Manufactures as a Percentage of Total Exports, 1960 and 1970*

	Exports (US\$ billions)		Percent of total export	
	1960	1970	1960	1970
<b>DEVELOPING COUNTRIES</b>				
Primary commodities	22.0	41.2	85.0	75.9
Manufactures	3.8	12.7	14.6	23.4
Miscellaneous	0.1	0.4	0.4	0.7
<b>TOTAL EXPORTS</b>	<b>25.9</b>	<b>54.3</b>	<b>100.0</b>	<b>100.0</b>
<b>DEVELOPED COUNTRIES</b>				
Primary Commodities	25.3	51.4	30.8	22.9
Manufactures	54.0	169.1	65.9	75.4
Miscellaneous	2.7	3.7	3.3	1.7
<b>TOTAL EXPORTS:</b>	<b>82.0</b>	<b>224.2</b>	<b>100.0</b>	<b>100.0</b>

Source: United Nations

In 1960 primary products accounted for 85 per cent of the exports of the developing countries as against 75.9 per cent in 1970 while the share of manufactures increased from 3.8 per cent to 23.4 per cent representing some progress in this decade. In developed countries also the shares of manufactures in total exports increased from 65.9 per cent to 75.4 per cent in 1970 while that of primary products declined from 30.8 per cent in 1960 to 22.9 per cent in 1970. In absolute terms the total exports of developing countries increased from 82 billion dollars in 1960 to 224.2 billion dollars in 1970, while similar figures for the developing countries were 25.9 billion dollars and 54.3 billion dollars respectively. So much so for the poor of the earth who comprise 70 percent of the population of the non-communist world.

### BURDEN ON SUBCONTINENT

It is maintained that during 1976 the increase in the prices of crude oil will impose an additional annual burden of more about 13 billion dollars per annum on the developing countries as compared to what they paid for oil in 1973. The Oil exports of OPEC countries are expected to be 111 billion dollars during 1976.

To most of the world's poor countries, not blessed with any oil to sell, world trade has become an expensive proposition. Their trade deficits have soared. Their overall trade has grown since the October 1973 war in the Middle East but not so fast as for the industrial world. According to a World Bank report, the poor non-oil countries accounted for 14.3% of world

trade last year, down from 15.5% in 1970 and 18.7% 10 years earlier. Meanwhile, the oil producers' share jumped from only 6.3% in 1970 to 16.8% last year. The quintupling of oil prices since 1973, caused much of the shift.

The value of world trade grew by 45% in 1974 — 18% of it caused by higher oil prices. The World Bank estimates that another 13½% of the jump came from inflated prices for manufactures, and only 9% from higher prices on commodities exported from the less developed countries.

The abrupt rise in oil prices added about 8.5 billion dollars to the non-oil less developed countries' import bill in 1974. The 1972-73 world boom had already faltered when the oil prices—rise turned on impending world recession into a slump in demand. The industrial countries promptly reduced their demand for other exports, notably from poor countries. The organisation for Economic Co-operation and Development estimates that in 1974 the non-oil LDC's exports to the West were cut by \$55 billion from what they would have been without the slump in demand from the rich countries and those of the centrally planned (communist) economies by perhaps \$115 billion.

The combined 1975 trade deficit of non-oil LDC's could be \$33 to 85 billion, much higher than the already insupportable \$26 billion deficit in 1974, and over three times the one in 1970.

For the majority of the less export-oriented LDCs, a prospective tenfold rise in trade deficits means serious trouble. In theory, the gap could be narrowed in anticipation by (a) importing less or (b) exporting more.

Only the poorest countries cut back their imports in 1974. In current prices all the non-oil LDCs taken together bought nearly \$115 billion worth of goods from abroad, compared with \$73 billion in 1973. In real terms their combined imports grew by 9% whereas to offset the added burden of oil prices they would have had to cut imports by almost this amount. And the 25 least developed nations of the world actually cut their imports (by 6% in volume terms) last year, as the Indo-Pakistan subcontinent posted only a marginal 1% real drop. It confirmed India, Pakistan and Bangladesh as the only group of LDCs with a cut back in imports between 1970 and 1974.

Meanwhile the terms of trade moved strongly against the non-oil LDCs continuing into 1975. The World Bank has sampled 40 non-oil LDCs and found an average 15% fall between 1973 and early 1975. It confirms though a longer trend of deteriorating terms of trade. Both UNCTAD and the World Bank have come to the same conclusion. On an average the terms of trade for commodity exports of the LDCs (excluding oil) dropped by almost 2.5% a year until the oil crisis. It is an appropriate gauge for the commodity exporters among developing countries but the terms of trade were even worse for the poorest.

Thus the non-oil LDCs are compounding debts and their repayment will pose a serious problem. Exporting more will involve greater sacrifice though that is the World Bank's main recommendations. Nobody in the industrial world seems ready to concede more generous import terms. They themselves are all out to export, until the next boom anyway. Likewise a massive capital inflow to the LDCs is unlikely. In 1974 private flows stagnated in real terms, although assistance from governments rose. Overall and inevitably the transfer of funds reached \$34 billion, almost double the average 18.5 billion for the three preceding years. But a large part of that was from OPEC countries which gave selectively, except when through the International Monetary Fund and World Bank. In 1975 if the non-oil LDCs are not to be forced to tighten their belts intolerably, finance from OECD and OPEC must rise to nearly \$43 billion in current terms, even if the real rise will not be substantial.

Trade credits from the West in 1974 flowed more freely to the non-oil LDCs after a dry spell. They amounted to about \$5 billion, but now industrial countries could start cutting back if some rich countries reflect and exporting becoming easier amongst themselves. Then again, trade credits are no help in the long run. Debts incurred have to be met some time. So importing more today may mean importing less tomorrow. For a handful of countries the Euromarket is still open. But few are credit-worthy. Last year, three-quarters of the \$6.5 billion public credits raised on Eurocurrency markets went to Brazil, Mexico, Argentina and the Philippines. The bond market itself has never been dominated by LDCs. Individual LDCs secured only 8.5% of

all issues during the slack 1972-74 period, and a further 15% were raised indirectly through various development banks.

The 10% increase in oil prices announced by OPEC in September 1975 will further aggravate the difficulties of the non-oil LDCs and who can forecast what happens after mid-1976 when oil prices are to be revised again?

The export problems of the developing countries centre around three features of international trade in primary commodities:

- i) the relatively slow growth of commodity exports;
- ii) the trend of commodity prices to decline in relation to the prices of manufactured goods particularly durable consumer goods and capital goods;
- and iii) the short-term instability of commodity prices.

The export problems of the developing countries relate mainly to agricultural commodities and simple manufactures which mostly comprise processed locally available raw materials. The income elasticity of demand for primary products and simple manufacture tends to be low and takes on values below unit. This contrasts with the higher income elasticity of demand for manufactured goods with values which are mostly more than one. Illustratively, a 5 percent rise in national income may cause a 2 per cent rise in the consumption of agricultural product and simple manufactures, but the rise in the consumption of other manufactured goods and services would be 8 percent. This is so because once the basic necessities of life are satisfied additional incomes are unusually spent on durable consumer goods, services, travel, education and so on. Again the depressing fact of a low-income elasticity for the consumption of primary commodities and simple manufactures in the developing countries is enforced by a continuous and sustained growth of synthetic and manufactured materials that replaced primary materials. Artificial rubber, synthetic fibres and detergents have challenged natural rubber, cotton, wool, jute, oils and other commodities. The greater pity of it is that the exports of the developing countries are not even keeping pace with the slow growing consumption of primary commodities and simple manufactures in the developed countries and the latter have been meeting a substantial part of their needs for these things either out of domestic production or by imports from other developed countries.

Agricultural imports from the developing countries are being replaced by those from the technologically advanced countries of Western Europe, North America and Australia. This displacement is largest in the case of the products of the temperate zones, but the U.S.A., which is the world's leading primary exporter, also exports large quantities of tropical products such as tobacco and cotton. To make matters worse, industrialised countries impose import restrictions in order to protect their farmers and the European Economic Community (EEC) imposes variable import levies to prevent foreign producers from making inroads into the sheltered markets extended to the farmers in EEC countries. Restrictions have also been placed on the import of simple manufacture such as cotton yarn and textiles from the developing countries with a view to protecting their domestic industry.

The suggestion that the advanced countries should concentrate on more sophisticated goods and leave simple manufactures for the developing countries was first made by the author in 1958-59 during the Commonwealth Prime Ministers' Conference. At that time it was listened to attentively as an expression of defiant challenge to the economic supremacy of the West.

The detrimental effect of relative stagnancy in commodity exports, both in terms of volume and prices, as compared to the dynamism exhibited by the export of durable consumer goods and plant and equipment have led to a worsening of the terms of trade for the developing countries and thus made the poor even relatively poorer. As indicated earlier, this amounted to \$16.7 billion between 1950 and 1962.

The Third World countries stand united in their demand for ameliorating this long-standing injustice and in this they have been supported by eminent authors like Gunnar Myrdal and Paul Prebisch. The adverse long-term trends in the exports and prices of primary commodities and simple manufactures are reinforced by the short-run instability of commodity exports. Short-run adverse fluctuations in exports earnings fall very heavily on those developing economies which are so effective. The price volatility of primary products entering in world trade is

caused by their low elasticity of supply and demand. Even small shifts in demand in industrial countries cause sharp changes in prices because the supply of commodities is relatively fixed in the short-run. Prices also react violently to changes in supply, but by and large the consumption of primary commodities and simple manufactures in the developed world is rather insensitive to prices changes; the price elasticity is below unity.

There are very good prospects of increasing trade amongst developing countries themselves for their common good. Serious thought has only been given to this in recent years and a lot can be done in this sphere, as indicated in Table 19.17 (below).

TABLE 19.17

*Value Indices of Direction of Exports*

1963 = 100			
From Developed to Developed	From Developed to Developing	From Developing to Developed	From Developing to Developing
13.6	15.2	18.4	19.4
30.8	49.1	50.4	74.6
32.3	49.1	58.8	68.6
44.0	66.5	73.2	97.0
43.0	66.1	64.5	82.1
90.6	94.8	91.2	95.4
125.1	117.1	114.7	114.2
166.1	144.9	142.9	131.6
225.4	182.0	177.0	167.3
250.2	205.7	196.5	185.7

*Source:* United Nations.

Table 19.17 shows that within 8 years (1963 to 1971) the exports from developing countries to developing countries increased by 85.7 percent; of course the increase in this period was much higher in the exports of developing countries to developed countries (105.7 percent) while that in the exports of developed countries to developed countries was even higher (150.2 percent).

The developing countries are demanding new trade policies and demand that these include improving commodity exports through effective international commodity agreements. According to report in early August 1975 the non-aligned developing States have drafted an Agreement for a 3 billion dollars buffer stock of 10 major commodities. UNCTAD has also put forward a similar proposal as part of an integrated programme to stabilise commodity prices, export earning and supplies. Attempts are also being made by developing countries to expand their industrial exports. Manufactured goods account for only around 25 percent of the exports of developing countries, and even half of these are shared by 5 or 6 countries. The developing countries urge, with the support of experts like Gunnar Myrdal, that preferential treatment should be given to their exports of primary products and simple manufactures by the industrial countries and that the developing countries should accord preferential treatment to each other but not to the developed countries. The argument emphasises that the most-favoured-nation treatment policy (under which countries confer on each other trade concessions that either may subsequently grant to any other country) is suitable between economies on the same level but not between rich and poor economies. This is a logical extension of the infant industry argument.

## COMPENSATORY SCHEME

Some form of preferential treatment will have to be worked out but as of now the developing nations are asking for free access to the industrial markets of the developed world, without any import restrictions of any kind. The developing countries are also demanding a compensatory scheme that would automatically transfer financial resources to a developing country in order to offset the loss of foreign exchange resulting from the worsening of the terms of trade. This would be in the nature of an international extension of the compensatory programmes that are already offered for agricultural producers by the USA and the European Economy Community for their own producers.

A compensatory scheme of this kind would sustain the capacity of a developing country to maintain its import capacity, despite the decline in its external purchasing power due to worsening of the terms of trade. The developing country's loss would be matched by an equal amount in external financial assistance through the compensatory scheme.

Last, but by no means the least, is the demand by the developing countries for international finance on concessional terms to enable them to speed up their economic and social growth and reach a stage when they can demand more trade instead of aid. This is being dealt with in a subsequent section on the nature and role of foreign aid.

## PEARSON RECOMMENDATIONS

The Pearson Commission on International Development in a report to Robert S. McNamara, President of the World Bank, had made a series of very useful and thoughtful recommendations on trade policy and development, some of which have been accepted ever since they were made in the autumn of 1969. These recommendations are recapitulated as follows, particularly in view of represented a "Grand Assize" of the developed world and were an international group of "stature and experience." :

- (i) Developed countries should eliminate, as soon as possible, excise and import duties on non-competing products of special interest to the developing countries.
- (ii) Developed countries should draw up plans in respect of protected commodities, designed to assure that over time an increasing share of domestic consumption is supplied by imports from developing countries.
- (iii) Discussions should be expedited leading to a programme of supplementary finance to deal with problems caused by unexpected and sustained shortfalls in the export earnings of developing countries.
- (iv) Financing of reasonable buffer stocks in support of well-conceived commodity agreements and policies should be recognized as a legitimate object of foreign aid.
- (v) No new quantitative restrictions should be imposed on products of special interest to developing countries and all existing quantitative restrictions on these products should be abolished during the 1970's as rapidly as possible.
- (vi) Developed countries should establish a generalized non-reciprocal scheme of preferences for manufactured and semi-manufactured goods produced by developing countries before the end of 1970.
- (vii) Developing countries should negotiate a wide-ranging agreement on tariff concessions, extended to all developing countries, before the end of 1970.
- viii) The IMF, in cooperation with UNCTAD, should study the possibility of a clearing arrangement for the financing of trade among developing countries on a global scale.
- (ix) Bilateral donors and international agencies should provide financial assistance to institutions, such as development banks and clearing and payment unions, which are designed to promote trade among developing countries on a regional scale.
- (x) Regional development banks, in cooperation with other international agencies, should take the lead in making available special funds for the refinancing of export credits granted by developing countries, and in establishing regional export credit insurance facilities.

The acceptance and implementation of this part of the Pearson Commission's recommendations would go a very long way in meeting the legitimate demands of the Third World in the sphere of international trade. These recommendations are the verdict of a "Grand Assize" of outstanding human beings of "stature and experience" from the developed countries who showed statesmanlike vision in appreciating the current and cross-currents of the day and who wished to mould a future in which both developed and developing countries could co-exist in peace and prosperity. Time is fast running out.

### **EXPORT OR STARVE: ILO WARNING**

A study released by the International Labour Organisation (ILO) in August 1975 maintains that dramatic relaxation of the existing trade barriers would benefit both developed and developing countries. The study said that, contrary to popular belief, such trade liberalisation need not be negative for the industrialised countries.

Dealing with relationship between trade and jobs, the study said: "Be that as it may, the harsh fact is that many developing countries face critical choices of either to reduce oil imports and suffer losses in production and jobs, or cut back the supply of other badly needed products such as food and fertilisers."

The study further said the Third World must export if it is to be saved from massive starvation. The ILO figures show that some 300 million people in developing countries are currently unemployed and between now and the end of the century another 1,000 million men and women will be added to the world's labour force, and almost half of them will be looking for gainful employment, unless something is done to reverse the trend. The warning by the ILO is timely and portends international suffering on a massive scale unless a lot is done and done soon.

### **THE INCOMES GAP**

There is an enormous gap in the incomes of the developed countries and the developing. Those of the Western countries doubled to 4,000 dollars between 1952 and 1972, that of the developing countries rose by no more than 125 dollars during the same period from 175 to 300 dollars. This unequal development left 300 million people in the developing countries, more than one-third of the world's work force, unemployed or under employed. It is estimated that some 700 million were living in poverty and close to 500 million were suffering from protein deficiencies.

Rising Import costs coupled with falling export earning had caused the poor developing countries, balance of payments deficit to rise from 12,000 million dollars in 1973 to 45,000 million dollars in 1975. Experts have estimated that if we are to reduce the gap in per capita income between the world's developed 30 percent and the under developed 70 percent from the present ratio of 40 to one to at least 5 to one in the next 50 years, we need 7,200 billion dollars in development assistance to the developing countries. If the programme is launched in the year 2000 rather than now we would need 10,700 billion dollars to achieve the same result by the year 2025. The cost estimates are indeed staggering but they pose a fundamental challenge to the human conscience. Whether the response will be adequate and soon enough is a moot point.

### **Trade liberalisation**

There are a number of international and regional arrangements for liberalization of trade. Their aim is to remove all barriers to international trade and move in the direction of eliminating all legal and administrative restrictions on the movement of goods and services between the countries concerned. The idea is to provide a greater degree of competition through the enlargement of the market so that everybody can share in the benefits accruing from the division of labour and the economies of large-scale production. Regional arrangements vary from preferential trade arrangements at one end to an economic union at the other extreme.

A preferential trade area establishes a system of tariff preferences in the region. Under this arrangement preference may be given to a country or to a group of countries whereby duties on imports from them are levied at a lower rate than from the other countries. It also implies

a movement towards a free flow of goods unhampered by administrative restrictions such as import licences and exchange control measures. It sometime happens that in the case of a preferential trade system the administrative restrictions are either completely removed or are less restrictive on imports from the countries so cooperating as compared to other countries.

A **free trade area** simply tries to remove quantitative restrictions and customs tariffs on trade amongst its members. Administrative restrictions on trade within a free trade area are also, generally speaking, minimal. Other types of arrangements for pursuing economic integration are more demanding.

A **customs union** envisages uniform tariffs in participating countries in their transactions with outside countries. A customs union is an agreement established by two or more countries under which they agree to eliminate all tariffs and quantitative restrictions on the movements of goods and services between them. Member countries also evolve a common tariff and non-tariff barriers in relation to trade with non-member countries. A customs union is also referred to as a tariff union.

**Common markets** go even further than customs unions and require that restrictions on all factor movement within them be abolished. In a common market trade restrictions amongst members are abolished and a common external tariff is adopted. In a common market there is also the likelihood that cooperation may extend into the social and political fields as well.

An **economic union** goes even further than the Common Market and attempts to harmonise of integrate economic, monetary, fiscal, social and counter-cyclical policies; all this implies a substantial degree of supra-nationality.

Of all forms of economic integration, the preferential trade area and free trade area are the least onerous in terms of involvement. Cooperation in trade matters is limited to arrangements between the countries concerned by which they agree to reduce or remove all customs duties on trade passing between them. Each party is free to unilaterally determine the level of customs on import duties on goods coming from outside the area.

The main problem of the preferential and free trade areas relates to the origin of goods since only those goods which originate in the area are entitled to its privileges. The problem of origin can be resolved in one of three ways: (i) the goods in question have been wholly produced within the area, in which case there is no problem; (ii) the goods have been produced within the area and the value of materials imported from countries outside the area which have been used in the production process does not exceed 50 percent of their f.o.b. (free on board) value; (iii) thirdly, the goods have been produced by a specified process of transformation. The second alternative is called the "percentage criterion" while the third is termed the "process criterion."

A customs union would be more advantageous if the economic partners are actually competitive and only potentially complementary. If their economies are already complementary, the gains on the production side would be relatively smaller. Secondly, a customs union would have a greater effect on economic welfare the higher the initial duties on imports from the partners. This is so as high duties imply high levels of inefficiency which are being extended protection. Lastly, a customs union would raise welfare by a greater extent if a greater percentage of world production, consumption and trade was covered by it. If we consider the dynamic analysis of a custom union it would be observed that a larger market provides more opportunities for the exploitation of the economics of large-scale production. It also increases the intensity of competition; national monopolies become oligopolies of the customs union and there is a reduction of oligopolistic collusion. Finally, in a customs union the partners are able to extract better terms when they bargain together in international negotiations.

As far as we can visualise, in mid-1975 an economic union is the farthest extreme of economic integration which implies substantial integration in all facets of life, including the political fields. There is no doubt that an economic union practices the concept of supra-nationality.

It should be emphasized that the basis for any effective form of regional collaboration with a view to removing trade barriers and introducing tariffs and quota preferences in varying degrees is primarily based on political considerations. Economic considerations are paramount and provide a rational basis for such cooperation to the advantage of each of the participating countries but

**the impulse is always generated by political considerations and all worthwhile institutional arrangements of this kind have an intensive political background.**

Only those countries which do not have any real political differences and which do not arouse powerful national emotions and sentiments against one another can cooperate effectively in the sphere of integrated trade relations. It is sometimes argued that the building of trade relationships will lead to the development of better political relations. This does not happen very often, and history tells us that there should be a common political 'wavelength' before effective and worthwhile economic cooperation can be secured.

## EEC AND EFTA

Let us first take the examples of the European Economic Community (EEC) and the European Free Trade Association (EFTA). The idea of a united Christendom led Pierre Dubois to propose, as early as the 14th Century a European Confederation to be governed by a European Council of "wise, expert and faithful men". A European Army was proposed in the 17th Century by Sully to keep the peace in Europe. In 1693 William Penn suggested a "European Diet, Parliament, of State". In the 19th Century, Proudhon favoured a European federation and prophesied disaster if it did not take place. After World War, I serious attention was given to a European Community and the Prime Minister of France declared that he would work for the building of a United States of Europe. The Cold War, between the USA and the Soviet Union after World War II led to the demand for a third force, the voice of European, which would act as a bridge between the Eastern and Western extremities. The division in Europe between the EFTA countries and the EEC countries was largely because during the second half of the fifties the UK was still a world power and was less committed to Europe. Its main area of policy had a different emphasis as compared to that of the six European powers which together formed the EEC. In extending aid under the Marshall Plan, the United States made it clear that the European movement enjoyed the encouragement and support of the USA. The generosity of the United States, extended to Western Europe in the late forties and the early fifties was politically motivated in order to provide a bulwark against the extension of communist influence into Europe; the desire to rehabilitate Europe was important enough but it was probably a sop to satisfy the conscience of American public opinion.

France, under the late President de Gaulle, was anathema to the British. One can only presume that the real reason for the hostility of President de Gaulle to the British entry into the EEC was his trying to ensure that the British had finally reached a political accommodation which was in line with Western Europe before they were permitted to join the EEC.

This notion would find support in the celebrated conversation in February, 1969, between Ambassador Christopher Soames (the then British Ambassador to France) and the late President de Gaulle in which in expressing his ideas on the future organization of Europe, de Gaulle said, for the first time, that he would welcome talks between France and Britain which he would like the British Government to initiate. The official version of the British Foreign Secretary states that the President of France "made clear that he wanted to see a Europe completely independent of the United States, which would result in the disappearance of the North Atlantic Treaty Organization (NATO) as we know it; that he would like to see the European communities changed into a looser form of free trade area with arrangements by each country to exchange agricultural produce, and a small inner council of a European political association, consisting of France, Britain, Germany and Italy."

Thus began the travail of the United Kingdom to enter into the inner citadel of European culture and civilization. President de Gaulle was not the only one who was having fresh thoughts in 1969. Another well-known pan-European leader, M. Rey, President of the EEC Commission, addressing the European Parliament in March, 1969, reaffirmed:

"We and all our governments are at one in thinking that there can be no changing the nature of the community; no transformation of the Common Market into a free trade area; and no going back on what we have maintained for ten years, that a free trade area is not a good way of organising relations between highly industrialized countries. On



the contrary, it is in a tighter organisation, and in common policies, that we must seek a solution to our problems. In this respect there has been no change in the opinion of either my colleagues or myself”.

The EEC Commission disliked the EFTA concept because it did not implicitly invoke significant centrifugal forces amongst member countries. Again while EFTA concentrated on the economist's interpretation of economic integration, the EEC's concept was primarily that of a politician. The economist regarded political union as an off-shoot of the real and primary goal of economic integration while the politician regarded economic integration as a means for paving the way for much closer political integration. Ultimately, the voice of the politician prevailed and the UK in a widely debated referendum gave a firm “Yes” vote in mid-1975 on the issue of its joining the European Economic Community. The referendum brought together strange bedfellows. The extreme left wing elements in the Labour Party joined hands with the extreme right wing elements of the Conservative Party to voice support for a “No” vote; the extremists of the Labour Party wanted to isolate the UK from the economic oscillations and the relatively less generous social security systems of Western Europe, while the diehard Tories wanted the British flag to fly higher than that of any other Western European country. Basically, both the extreme views resisted any surrender of sovereignty by the Queen in Parliament. The moderate Labour and Conservative elements desired that the supra national political and economic forces which hold sway over Western Europe should also bring a fresh outlook to the British scene and assist in putting it up to a higher economic plane at the Western European level.

Let us now turn to the Indonesia-Pakistan Economic and Cultural Organization (IPECO) and the Regional Cooperation for Development (RCD) with both of which the author was intimately associated right from their inception.

### IPECC AGREEMENT

The IPECC Agreement was signed in August, 1965, some 15 days before the advent of the Indo-Pakistan War in that year. IPECC was an institutional arrangement which provided for a Ministerial Council, a Planning Council and expert committees on trade, joint ventures, communications, technical assistance and cultural cooperation. A Secretariat was established at Jakarta and IPECC even had its own flag.

The background of this agreement was the long and sustained personal relations between the late President Soekarno on the Indonesian side and the late President Ayub and Prime Minister Zulfikar Ali Bhutto (then Foreign Minister) on the Pakistan side. The author was privileged to work in close association with the Indonesians ever since 1955 when he served as a Deputy Secretary General of the Afro-Asian Conference at Bandung under the then Indonesian Foreign Minister, Ruslan Abdul Ghani, who was the Secretary General of the Conference. In those six months an excellent working relationship was established with the Indonesian at almost all levels of government. Other members of the Pakistan contingent were Motahir Hussain of the Pakistan Foreign Office and Moazzam Ali who until recently headed the Pakistan Press International (PPI). Ever since then a good relationship between Pakistan and Indonesia has been built up.

The late President Ayub and Prime Minister Bhutto harnessed the prevailing forces of history to establish a firm political link with Indonesia with economic and cultural cooperation as the base. Pakistan extended foreign exchange loans to Indonesia as a gesture of solidarity, despite its own foreign exchange problems. The assistance given by Indonesia to Pakistan in the 1965 War marked the peak of Pakistan-Indonesian relations. IPECC had more than accomplished its purpose in providing the then East Pakistan with a dependable ally who stood shoulder to shoulder with Pakistan in a moment of crisis. Relations between Pakistan and Indonesia have continued to grow ever since although they did receive a jolt after the late President Soekarno was removed from office. The steady course of the IPECC relationship during the 10 years has been maintained by the steady influence of Foreign Minister Adam Malik on the Indonesian side and Prime Minister Bhutto on the Pakistan side.

Although the economies of Indonesia and Pakistan are to a considerable degree complementary, the basis of the relationship continues to be a political one with economic collaboration being emphasised for good measure.

## R C D

The Regional Cooperation for Development (RCD) was established in the historic city of Istanbul on July 21, 1964, and marked the beginning of new era of close and coordinated economic and cultural operation on an institutional basis amongst three major Muslim states—Iran, Pakistan and Turkey. The ties of a Common Faith, a Common Culture and a Common Outlook on the economic and political problems of life, and, above all, of a national will to chart a Common Course of history that bind the three countries go back several centuries, but it took the Baghdad Pact, which was primarily a political institution, to bring these three countries together in the mid-fifties.

The Baghdad Pact was sponsored by the USA and the UK to prevent overt or covert subversion of free institutions in the Middle East. Iran, Iraq, Pakistan and Turkey, which were politically like-minded countries at that time, agreed to join the organization. Whatever its merits and demerits, the Baghdad Pact must be credited with bringing together the four member countries of the region on an institutional basis in the economic sphere and providing the framework for promoting economic collaboration on a worthwhile scale. It would be well to recall the names of those with whom the author was privileged to be associated with. In the Baghdad Pact ever since its inception: From Iran, Jamshed Amouzegar (who later rose to great heights in his own country as Finance Minister, Interior Minister and Minister Incharge of Petroleum Negotiations), Mehdi Sami (who later became the Governor of the Central Bank and Head of the Plan Organization), Dr. Alikhani (later Minister of Economy), and Hoshang Batmanglij (currently Ambassador at the Iranian Foreign Office looking after international economic relations), Engineer Mojtaba Sultani, and Communications Engineer Samii; from Turkey, the late Prime Minister Adnan Menderes, late Foreign Minister Zorlu, Hassan Isik (later Foreign Minister and Defence Minister); Mehmet Baydur (later Minister for Commerce and Ambassador to several countries); from Iraq, the late Prime Minister Nour-Al-Said, the late Foreign Minister Fadeh al Jamali, Durwesh ul Haideri (Head of the Plan Organisation), Adnan Askari (now working with IATA at Beirut), and the Paccachi brothers (one whom is currently Petroleum Adviser to the Ruler of Abu Dhabi); from the U.K. Sir Ferguson Crawford, Sir Paul Gore-Booth, Lord Jellicol, Sir Gilbert Larthwaite, and Sir Dennis Wright; and from the U.S.A. the late Secretary of State John Foster Dulles and John Ferres.

These are names which should not be forgotten when the history of economic cooperation in the RCD region is written, because these were the people who really harnessed the historical prevailing forces of regional cooperation for the common cause. There is of course one statesman in the region who has survived the vicissitudes of Time and Fortune for three decades and the stamp of whose personality is readily recognisable on all major facets of development in this region. That statesman is H.I.M. Raza Shah Pahlavi of Iran.

The great moment in the development of the Baghdad Pact came when the member countries of the region decided to boycott all meetings following the Anglo-French-Israeli invasion of the Suez Canal in 1956. The USA and UK were very keen to activate the Baghdad Pact after the invading forces had been compelled to quit the Egyptian area following pressure from the USA. The USA and the UK decided lobbying to activate the Baghdad Pact. The governments of the Member countries of the Baghdad Pact region agreed to a meeting of the Committee of Economic Experts in 1957 and the author was elected Chairman of this Committee which met in Baghdad. At this meeting it was decided to establish a network of transport and communications in the region covering tele-communications, roads and railways. It was for the first time that the four member countries of the region really united to extract from their developed partners the price of their political cooperation in economic terms. At this meeting the groundwork was also prepared for intensive collaboration in the field of trade, industry and technical co-operation.

The murder in 1958 of King Faisal of Iraq, the Prime Minister Nouri Al Said, and Foreign Minister Fadeh Al Jamali set up a new challenge to the Baghdad Pact. The news was communicated to the Pakistan delegation while they were in mid-air en route to Istanbul. There was much debate on whether or not the British forces at Habbaniyah (close to Baghdad)

should be used against the forces of the coup responsible for murdering King Faisal. The discussion closed on the note that there was nobody left on whose behalf there could be an intercession, for the coup had brutally massacred everybody of any note who had placed Iraq on the path of political stability, economic prosperity and social development.

### BIRTH OF R.C.D.

After the elimination of Iraq from the Baghdad Pact which was renamed CENTO (Central Treaty Organisation), the Pact lost much of its efficacy, but in 1975 CENTO provided half a million dollars to Pakistan to complete a microwave link, and CENTO Secretary-General Umit Haluk Bayulken told reporters in Karachi on February 12, 1976, after a tour of the country, that Pakistan would shortly receive two million dollars from CENTO for upgrading the microwave links on her side. He also disclosed that the upgrading of all the CENTO microwave links would be completed by December, 1977. Iran and Turkey were also completing the links in their respective areas.

CENTO paved the way for the establishment of RCD (Regional Co-operation for Development) in July, 1964. Mr. Baytulken felt that CENTO had brought the three countries, Pakistan, Iran and Turkey, closer together and that RCD and CENTO were not contradictory to each other. If RCD made progress, CENTO states should be happy.

It was in early July that the late President Ayub, accompanied by the then Foreign Minister Zulfikar Ali Bhutto, was on his way to London to attend the Commonwealth Prime Ministers Conference. He stopped in Teheran for discussions with H.I.M. the Shahinshah of Iran and they talked of the desirability of forging economic and cultural links between Iran and Pakistan. President Ayub and Foreign Minister Bhutto thereafter proceeded to Turkey. It was the first visit of the late President Ayub to Turkey after the death of Prime Minister Adnan Menderes and he had been persuaded to visit the country on the insistence of an old Air Force colleague who was then Ambassador to Turkey (Mr. Rabb). In Turkey President Ayub and Foreign Minister Bhutto held discussions with the late Prime Minister, Ismet Inonu and they also talked of forging closer economic and cultural links between Turkey and Pakistan. Our people suggested that instead of arranging a series of bilateral arrangements, it would be better to have a multi-lateral economic cooperation agreement amongst all the three countries. The Turks agreed. His Imperial Majesty the Shahinshah too readily accepted the suggestion and we received instructions at Karachi to prepare a detailed scheme of collaboration amongst the three countries.

The experts met at Ankara, where the author headed the Pakistan team; Majid Rehnuma, Dr. Yeganneh, Dr. Nikpey and Houshang Batmangliyd were the prominent members of the Iranian team and Turkey was represented by a strong contingent consisting of Ambassadors Kamaran Guren and Memuduh Aytur of the Turkish Plan Organization (Turgot Ozel). We worked day and night for a whole week and ultimately settled on a draft which formed the basis of the RCD Charter. It was signed with great fanfare on July 21, 1964, at the Domabahce Palace on the Bosphorus by His Majesty the Shahinshah of Iran assisted by the late Prime Minister Hasan Ali Mansur and the then Foreign Minister Abbas Aram on the Iranian side; by then President Gemal Gursel assisted by the late Prime Minister Ismet Inonu on the Turkish Finance side; the late President Ayub assisted by the then Foreign Minister Bhutto and the then Finance Minister M. Shoaib on the Pakistan side.

The RCD relationship blossomed as never before as a movement of new dimensions. It was a people to people relationship; it was a special relationship; and above all it was a common bond of understanding amongst like-minded peoples. It was said that the benefits of the RCD could not be measured in monetary terms because the philosophy behind it was of a much higher order. Iran, Pakistan and Turkey have always provided solace, support and strength to each other in the hour of need. RCD provides a measure of reassurance of the increased depth in Pakistan's defence.

The political importance attached to RCD and IPECC in Pakistan was very high indeed and the author who was incharge of this work in the Government of Pakistan, while working under the supervision of three Ministers (the then Foreign Minister Zulfikar Ali Bhutto, the then Finance

Minister M. Shoaib, and the then Deputy Chairman, Planning Commission, the late Said Hasan), was still required to report directly to the President of Pakistan. This was done on the basis of a Cabinet decision.

Stressing the positive and peaceful role of RCD, the then Foreign Minister Bhutto in a statement on the first anniversary of RCD stated: "The formation of the Regional Co-operation for Development in July 1964, represents a significant landmark in co-operation among Iran, Pakistan and Turkey. The historical links binding these three countries go back to more than a thousand years and their peoples share a common cultural background. Reza Shah Pahlavi of Iran and Kamal Ataturk of Turkey were regarded by the Muslims of the Indo-Pakistan sub-continent as heroes of the Muslim World and their example was a source of inspiration to the Indian Muslims in their struggle for freedom. It is natural therefore that Iran, Pakistan and Turkey, whose people share a common faith and a common cultural heritage should come together to plan for their mutual development and for the benefit of their peoples.

In this age of science and technology regional co-operation has become an important instrument in accelerating the pace of economic and cultural development. Pakistan as well as Iran and Turkey are striving to develop their economies with a view to providing a higher standard of living for their peoples. The stages in their economic development are more or less the same in all the three countries. All three suffer from the same handicaps, namely, non-exploitation and neglect of their material resources, lack of technically qualified personnel and a dearth of capital."

In Turkey the attitude of their Foreign Office and Plan Organisation in the first year or so was just a shade lukewarm when it came to assessing their involvement in RCD vis-a-vis the EEC. The change in government which brought Prime Minister Suleiman Demiral and Foreign Minister Ehsan Sabri Calyangil into power increased very considerably the enthusiasm for RCD in the Turkish quarters. The new Head of the Turkish Plan Organisation ably assisted by Ekrem Pakdemirli and with the political support extended by the Prime Minister and Foreign Minister gave a new dimension to RCD.

The political relationship between Pakistan and Turkey has never posed any problem, but as far as the Pakistan-Iranian relationship is concerned, it has been subject to certain pressures particularly when the growing Iranian economic collaboration with India was not appreciated in its right perspective. However there are differences of a fleeting nature even amongst brothers and these are generally dissipated by a better understanding of the compulsions of international relations.

RCD made remarkable progress between 1964 and 1969 but between 1970 to 1975 there has been little material progress despite the fact that by 1969 all the three countries were economically and politically prepared for a greater thrust towards economic integration. Probably the political forces working for multilateral cooperation under the aegis of RCD had been unable to make much headway against those political elements who favour the extension of bilateral arrangements rather than multilateral institutionalised arrangements. In the field of trade multilateralism is much more effective as compared to bilateralism but the future direction of RCD will depend on the political attitude to this organisation of three powerful people who are at the helm of affairs in the three countries, namely, His Imperial Majesty the Shahanshah of Iran, Prime Minister Zulfikar Ali Bhutto of Pakistan and Prime Minister Suleiman Demiral of Turkey. All three are known to be staunch protagonists of RCD. One can, therefore, look to the future of this organization with hope and optimism.

## EUROPEAN ECONOMIC COMMUNITY

The Treaty of Rome establishing the European Economic Community was signed on the 25th March, 1957 by the Governments of France, West Germany, Italy, the Netherlands, Belgium and Luxembourg. The United Kingdom joined the Organisation as a full-fledged permanent members in mid-1975. The basic features of the EEC are:

(i) The Treaty of Rome required that internal tariffs be eliminated over a period of 12 years by the end of 1969 and this was achieved 18 months before the target date. The Treaty also

called for the abolition of quantitative restrictions on imports (quotas) and this too was achieved.

(ii) Together with the elimination of internal tariffs, the EEC established a common external tariff which was equal to the average of duties on imports from third countries as of January 1, 1957.

(iii) A tremendous expansion of intra-EEC trade. There has also been some increase in the EEC's imports from third countries although this increase is modest as compared to intra-EEC trade.

(iv) Indirect taxes, which in the EEC consist of turnover taxes and excise duties, were a powerful factor preventing and distorting intra-EEC trade. This was criticised on two grounds: first, that the EEC was designed to produce an enlarged market which would be in the nature of a national market but varying national rates of indirect taxes militated against this concept; secondly, a common market can hardly be said to exist when new comers in various member countries pay different prices. The Treaty of Rome required the EEC Commission to make proposals for harmonising national turnover taxes. The first step in this direction was to enforce a common system on the value-added model by January 1, 1972. The second step will be the equalisation of the rates. In the case of excise duties harmonisation is being undertaken with respect to manufactured tobacco, alcohol and alcoholic beverages, petroleum products and sugar.

(v) Articles 92 and 94 of the Rome Treaty deal with state aid. Article 92 declares that, generally, state aids which distort or threaten to distort competition, by favouring certain enterprises or the production of certain goods, and which affect inter-state trade adversely, are incompatible with the Treaty. The Treaty does, however, state that some aids are acceptable. These are aids of social character granted to individuals, e.g., free school milk, aids to make good damage caused by national disasters and aids to regions in West Germany which suffered after the division of Germany. In addition other forms of aid may be deemed compatible with the Treaty. These include assistance to promote the development of backward regions; to promote any important project of common European interest or to remedy a serious disturbance in the economy of a member-state; and to facilitate the development of certain activities of regions provided the aid does not affect trading conditions to such an extent as would be contrary to the common interest.

(vi) With regard to state monopolies and purchases by the public sector, the Treaty of Rome calls for member-states to adjust the mode of operation of these bodies so that by the end of the transition period no discrimination as regards supplies or markets exists between member-states. The Commission has sought to achieve such a result, but with limited success.

(vii) Cartels and concentrations of economic power are supposedly to be discouraged, as was stated by one of the EEC Commissioner.

"it is....beyond dispute—and the authors of the Treaty were fully aware of this—that it would be useless to bring down trade barriers between Member States if the Governments or private industry were to remain free through economic and fiscal legislation, through subsidies or cartel-like restrictions on competition, virtually to undo the opening of the markets and to prevent, or at least unduly to delay, the action needs to adapt them to the Common Market." (European Parliamentary Assembly Debate, 1961).

But it is now officially recognised that the concentration policy should not merely control concentration in the interest of competition but should also "facilitate" them, and in practice facility has come to mean actively encouraging the process of integration. This latter interpretation provides for the creation of giant enterprises which can compete with their U.S. counterparts across the Atlantic. Refuge is also taken under Article 2 of the Treaty which provides for the achievement of an accelerated raising of living standards, and it is argued that increasing the scale of production is closely related to raising living standards.

The Treaty of Rome prohibits collusive practices and declares them null and void. There is an exception to this rule which states that a collusive agreement can be permitted if it improves the production and distribution of goods or promotes technical and economic progress; it is, however, necessary that the consumer enjoys a fair share of the resulting benefit. The European Court of Justice has held that under the Treaty practices which compartmentalise the Common Market are prohibited.

(viii) In keeping with the concept of a common market, as opposed to a customs union, the Rome Treaty provides for the free movement of labour. Freedom of movement can be limited on grounds of public safety, public security and public health. EEC has registered a distinct success in the complete freedom of movement being achieved in July, 1968, one and a half years ahead of schedule. Free movement does not apply to employment in public administration.

(ix) The Treaty of Rome provides for the abolition of all restrictions on the movement of capital. National rules governing capital and money market have to be exercised in a non-discriminatory manner. Capital movements which disturb the capital market of a member state can be regulated with the approval of the Commission. In case of a sudden balance of payments crisis a member-state can take protective measures including control of capital movements.

(x) The Treaty is not specific on tax harmonisation of direct taxes (that is, those on income and capital). If direct taxes were also harmonized then a member-state Government would find that, with a given national income, and a given distribution thereof, the revenue it could raise would be determined for it. But a Government might wish to raise more (or less) revenue than the amount it was forced to raise. This argument suggests that complete tax harmonization is likely to meet with some opposition from member-state governments and progress may, therefore, be slow.

(xi) The Treaty of Rome provides that during the transition period (from the signing of the Treaty upto the end of 1969) restrictions which limit the ability of nationals of one member state to set up business in another member state shall be removed.

(xii) While it is true that much of EEC policy is based on a free market and competition (such as removal of all tariff and non-tariff barriers and the introduction of an anti-trust policy relating to inter-state trade), yet the Common Market policies for agriculture, transport and energy presuppose the existence of managed markets.

The case of agriculture is a glaring example of a managed market where price levels are not left to the free play of market forces. In some cases the market is manipulated so as to bring about predetermined price levels with a view to guaranteeing an adequate income to farmers or even for changing the farm structure. It should be appreciated that the Rome Treaty was a delicate balance of the national interests of the contracting parties.

Let us consider West Germany and France in terms of trade outlets. In the case of West Germany the prospect of free trade in industrial goods, and free access to the French market in particular, was extremely inviting. In the case of France the relative efficiency of her agriculture (particularly her grain producers) as compared with West Germany held out the prospect that in a free Commodity agricultural market she would make substantial inroads into the West German market. The freeing of inter-state agricultural trade from all obstacles implied uniform prices over the whole EEC market. It gave rise to the establishment of a centralized system for deciding what the common price levels should be and Community machinery for manipulating markets in order to bring them about. A Community system for financing the support policy was also clearly called for. Although the machinery differs from commodity to commodity, the basic features of the EEC support system are as follows.

The income support to producers is guaranteed by manipulating the market so as to bring about a high price—a price which in itself provides an adequate remuneration to farmers. The internal price level is partly maintained by a variety of protective devices at the common frontier. These prevent imports from the low-price world market eroding the internal price level. But, in addition, provision is made for official support buying within the EEC so as to take off the market the excess of supply over demand at the predetermined support-price level. The commodities so purchased may be later unloaded on the EEC market when demand exceeds supply at the support level. Alternatively, they can be converted to other uses. Then again, they can be unloaded on the world market usually, at a loss.

In broad terms EEC policy is a direct descendant of the policies pursued at the national level prior to the signing of the Rome Treaty.

The decision to establish free movement of agricultural goods within the Community was probably the result of two factors. First, anything less than free trade in agriculture would

have struck the French as discriminatory when compared with the treatment proposed for industrial goods. Secondly, if trade was not free, and national price levels could differ, then countries with low price levels would enjoy a competitive advantage in so far as low food prices give rise to low industrial wages. In explaining the inclusion of agriculture within the Rome Treaty some account should also be taken of the sheer size of the agricultural section in 1958. At that time farming occupied 15 million persons—about 20 per cent of the working population of the EEC. A process of economic unification, leading to eventual political integration, could hardly succeed if it failed to address itself to the problems faced by such an important section of the population. Within the Six (EFTA was known as the Outer Seven) agriculture is an occupation in which the problem of relatively low incomes is particularly acute. In any case the agricultural vote was so important that agriculture could hardly be ignored. The expenditure involved in the EEC's common agricultural policy of supporting the prices of farm products is borne by a Fund contributed to by member governments and it will be integrated with the EEC budget.

Arrangements for a common transport policy were envisaged in the Treaty of Rome because transport costs are an important factor influencing trade and since the EEC sought to build up inter-state activity it was desirable that there should be a cheap and well-regulated transport system. The Commission took the view that a more flexible price system would have to operate in which enterprises would be free to operate on the basis of commercial criteria. This also implied powers to close down services if necessary.

The Commission's proposal was that the Community should adopt a rate bracket or fork-tariff system. This was to apply to road, rail and inland waterway transport, whether national or international. Provision was also to be made for rate publicity. Own-account transport, as opposed to that for hire and reward, was to be exempt. Under this system the relevant authorities would specify the maximum and minimum rates for particular types of traffic on the various routes, and consignors and carriers would be able to negotiate rates anywhere within the spread. The apparent logic of the arrangement was that the upper limit was designed to prevent monopoly exploitation which the lower limit designed to prevent the detrimental effects of excessive competition. Progress in constructing a common policy in transport has been rather slow in comparison to the achievements in agriculture.

Progress in the field of a common energy policy has been very limited. It found some impetus after the Arab embargo on oil exports in 1973 on account of the Israeli dispute and the subsequent quantupling of oil prices. Most of the EEC countries went their own way and efforts to pursue a common policy failed for there was a strong feeling in certain countries, particularly France, that a joint plan of action might result in an open confrontation with the OPEC countries and the situation might be aggravated. The EEC is attempting to create a 120-day stockpile of oil just in case there is another protracted oil embargo. Nuclear power is also being developed and coal is once again gaining ground as a source of oil.

(xiii) The Treaty of Rome, while creating a regime of intensified competition provides for social and regional policies to deal with the problems created by the replacement of stagnant industries by more efficient units and by regional economic disparities. It has been stressed that the EEC was conceived as being the forerunner of political unity. Such unity would be severely jeopardized if the economic policy of the Community did not tackle the problem of the disparities in income per head between the member-states and between regions within member-states. The success of the Community as a durable political entity could not be guaranteed if the arrangement was seen as benefiting some states or areas at the expense, or the exclusion, of others.

The latter point gathered added force when it is remembered that economic difficulties could be accentuated by political, linguistic, cultural and religious divisions. Economic difference could then fan the flames of separatism based on these latter factors. One of the effects of the creation of the Common Market is that it would stimulate greater efficiency, in that the more efficient enterprises would expand and the less efficient would contract. But industries are sometimes geographically concentrated either because of the existence of local supplies of raw materials and fuel or because of the external economies to which geographical concentration gives rise. Labour would, therefore, have to move to get new jobs but it has to be remembered that labour is

not always highly mobile. Then, again, the unemployed labour force might be unskilled and unadaptable. The EEC regional problem consists of the under-development of regions which are primarily agricultural and of the older industrial areas where a contraction in some particular industry has been taking place. The EEC has attempted to assist by drawing the attention of member states to the regional problem and by sponsoring conferences on the subject. Secondly, and more important, there is a provision for state aid for such regions. Thirdly, Community institutions play a positive and important role in providing capital for the regions.

## EUROPEAN INVESTMENT BANK

One of these is the European Investment Bank which was established by the Rome Treaty. The Bank has a separate legal identity but it is required to work in the closest collaboration with the Governments of the member-states and the Commission. Article 30 of the Rome Treaty specified three spheres of operation for the Bank. One is the financing of projects in the less developed regions. The second is the making of loans to enterprises that are forced to convert or modernize by virtue of the Common Market. Here the modernization or conversion has to arise as a result of tariff reductions and the like and the size and nature of the projects has to be such that they cannot be entirely financed by the member-states. The third sphere (which does not relate to the regional problem) concerns the financing of projects of common interest to member-states. Again the project has to be beyond the means of individual member-states if it is to qualify for assistance.

The social policy of the EEC is connected with the enlargement of the EEC cake. Such an enlargement has social as well as economic implications. The question of the distribution of the cake, and in particular the question of the level of social services and the like is largely left to the member-states in the first instance. In the longer term the influence of harmonization may be felt. Social policy is also secured through labour mobility. There is, however, no specific direction in the Treaty for harmonising the social costs of production such as social security payments. Actually the employees' contribution is much higher in the EEC countries as compared to the EFTA countries.

(xiv) Economic integration and interdependence as envisaged by the Treaty of Rome calls for coordinated macro-economic policies. The EEC rules for dealing with cyclical and balance-of-payments problems are contained in Articles 103 to 109. Article 103 is the only one relating to cyclical policy. It states that member-states shall regard as a matter of common concern their short-term economic policies and shall consult with each other and the Commission on measures to be taken in response to current circumstances. Article 104 enjoins each member-state to pursue the economic policies necessary to maintain equilibrium of the balance of payments and confidence in the currency whilst simultaneously ensuring high employment and stability of prices. In order to achieve all this, Article 105 requires the member-states to co-ordinate their economic policies. This Article specifically calls for co-ordination in monetary matters as well as collaboration between budgetary authorities and central banks.

## EXCHANGE CONTROL

Article 106 is designed to deal with the problem of exchange control inhibiting the integration of commodity and capital markets. Article 107 requires each member-state to treat its policy with regard to exchange rates as a matter of common interest. This Article also provides remedies against changes in exchange rates which are incompatible with the Rome Treaty. Article 108 states that where a state is already experiencing, or is threatened by, balance-of-payments difficulties, the Commission shall investigate the measures which the State has taken or intends to take and shall make recommendations. This article also provides for mutual financial assistance, either by means of a concerted approach to international institutions (this obviously refers to IMF), or directly by the Community. Article 109 was discussed earlier in connection with the free movement of capital. It enables a member-state to take immediate protective measures if a sudden balance-of-payments crisis arises. However, any state taking such emergency action has to reckon with the fact that the Council may subsequently, after the Commission has given its



opinion and the Monetary Committee has been consulted, suspend such protective measures.

The origins of the increased interdependence are not difficult to demonstrate. If an economy inflates its spending then some of it spills-over on the other member-states. The spill-over takes the form of imports from the member-states. The other member-states, therefore, become more prosperous and in turn spend money on goods produced by the state which originally inflated. Such an interaction is likely where there are no tariffs and other barriers inhibiting the flow of spending between states. When, on the other hand, there is substantial tariff protection, an increase in internally generated demand may merely drive up the internal price level, since imported supplies may be rendered uncompetitive by the tariff and will, therefore, not enter to absorb the extra demand.

### SPECIAL RELATIONSHIPS

(xv) The EEC has established special relationships with non-EEC countries on an individual as well as a group basis. The first two countries to take advantage of Article 238 of the Treaty (which provides for association with third countries) were Greece and Turkey. The Turkish association began operating on December 1, 1964. Under the Treaty a five-year (extendable to nine or more years) preparatory period was provided for which was aimed at strengthening the Turkish economy. Imports into the Community of four Turkish crops (tobacco, dried, figs, raisins and hazelnuts), which provided about 40 per cent of Turkish export earnings, were to benefit from tariff-free quotas which were subsequently increased. Also during the five year preparatory period the EIB was to lend \$67 million for Turkish development. The preparatory period was to be followed by a 12 years transition period during which a customs union would be established between the Six and Turkey. Over this period Turkish economic policy was to be harmonized with that of the Community and, as in the case of Greek association, the possibility of eventual full membership was held out.

The EEC has also concluded trade agreements with Nigeria, Algeria, Austria, Lebanon, Israel, Iran, Spain, Tunisia and Yugoslavia. In the cases of Pakistan, India, Ceylon, Hong Kong and Bangladesh there was to be a very gradual application of the common external tariff with special treatment in certain cases, and the negotiation of comprehensive trade agreements with Pakistan and India. For cotton goods special agreements would be made to ensure that exports to the enlarged EEC were not adversely affected.

In July, 1975, an agreement was signed between the Pakistan delegation (led by Ambassador Qamrul Islam) and the EEC under which Pakistan would export 16,000 tons of textiles to the EEC for three years beginning in 1976 after which the position would be reviewed.

(xvi) The main institutions of the EEC consist of the Council of Ministers, the Permanent Commissioners who hold office for a prescribed period of time, the European Parliament (indirectly elected by national parliaments it serves as an advisory body exerting moral pressure), the European Court of Justice, and the European Investment Bank. A former distinguished President of the EEC Commission has quite rightly remarked: "We are not in business at all; we are in politics."

### EUROPEAN FREE TRADE ASSOCIATION

In 1959 Austria, Denmark, Norway, Portugal, Sweden, Switzerland and the United Kingdom (the Outer Seven) formed a small free trade area which was called the European Free Trade Association (EFTA). Finland joined later as an associate member and in 1969 Iceland also entered the EFTA circle. Flexibility was the key to EFTA's operations and it primarily "enlarged the possibilities of political and economic action open to modern states" (Sir Frank Figgures, the first Secretary General of EFTA).

The aim of EFTA was to continue the efforts initiated under the Organisation for European Economic Cooperation (OEEC) to create a single market in Western Europe. Within six years of its establishment, and three years ahead of schedule, virtually all tariffs and quotas in the EFTA countries had been removed as far as extra-EFTA trade was concerned. Merchandise

trade between the member-states had increased on an average by more than 10 per cent a year. This compared with a figure for the same countries in the years immediately prior to 1960 of around 5 per cent. The reservations of the 1950s about the free trade area concept, such as doubts about the feasibility of "rules of origin", have been completely removed, and, moreover, impressive progress has been made with the implementation of "rules of competition".

There is a world of difference between EFTA's criterion of "fair competition" and the Treaty of Rome's objective to "harmonize" and create, in the EEC, equal conditions of competition. EFTA says: "Let us wait and see to what extent non-tariff barriers bother us." In the EEC, on the other hand, the urge is to act first; in other words, to head off potentially distorting elements before their effect is felt or before it is known whether the effect is worth bothering about. Indeed, all EFTA's attempts to deal with the non-tariff barrier problem are based on the premise that a comprehensive harmonization of national policies is not essential to progress in the field of non-tariff trade distortion.

Although EFTA prides itself on its pragmatism, it has worked hard to make its rules of competition less vague and to define more clearly member-states' rights and obligations under the "frustration clause."

Despite an absence of complaints it was decided in 1963 to review the articles relating to restrictive business practices and the right of establishment. A review of public procurement was started in 1964 and reviews of dumping and government aids were decided upon in 1965. The reviews seem to have established that progress has been made in the fields of restrictive business practices, the right of establishment, public procurement and dumping. The issue of government aids remains unresolved at the time of writing because it has inevitably become tied up with the disagreement between Britain and Norway over investment grants for aluminium smelters. In the meantime, there has been progress with respect to patent law, pharmaceutical standards, hallmarking and marks, of origin, all of which have come to the surface in recent years as being a few of the many areas in which informal barriers to trade may operate.

The EFTA arrangement kept a minimal of institutional machinery. There was nothing to match the majority voting in the EEC Council of Ministers or the High Authority's powers of independent action. There were absolutely no signs that the EFTA was a stepping stone to political unity—basically it was a commercial arrangement. The emphasis was on free trade in industrial goods; in a limited number of cases agricultural goods were treated as industrial goods and therefore tariff reductions were applied to them. In the main, agriculture was left out of the arrangement, each member being free to decide its own method and degree of support.

There was absolutely no question of the agricultural systems of the member-states being organized within the framework of a common agricultural policy. Members were free to determine the level of protection applied to goods coming from outside. This enabled the UK to maintain Commonwealth preference not only on industrial but also on agricultural commodities. The latter implied the continuance of a supply of cheap food and the deficiency payments system of agricultural support.

Two features of the EFTA arrangement deserve mention. One is that because of differences in national tariffs on goods coming from without, it was necessary to elaborate origin rules and a customs procedure so as to determine whether goods could be accorded the full benefit of the EFTA tariff reductions. The other was that EFTA made few demands on members in the field of harmonisation of taxation, social security charges and the like.

EFTA has a population of about 100 million and its per capita exports and imports are higher than those of any similar group. As Britain represents approximately half this market, her opportunities for expanding exports to EFTA are not as great as those of other member-countries. Nevertheless, it does provide a doubling of Britain's "home market", which should be an advantageous in industries where the size of the market is important.

Apart from Portugal and tiny Iceland, the EFTA countries are wealthy markets, ready recipients for the better quality British goods. The purchasing power of the market cannot be adequately understood by looking at population figures alone. Although it has only 33 per cent of the world's population, EFTA purchases 18 per cent of the world's imports. The United States and the EEC each have about twice the population, but only account for 10 and 25 per cent

of world imports respectively. Outside North America living standards in Switzerland and Sweden are amongst the highest in the world. Average per capita income is higher in EFTA than it is in the EEC. At times of balance-of-payments difficulties it is the exporting sector of a country's economy that faces the heaviest criticism. British exporters have been long criticized for not penetrating European markets sufficiently. Since sales in the European Economic Community (EEC) have been making substantial progress, criticism has been directed to the British performance in the European Free Trade Association (EFTA). Thus it was that in mid-1975 the U.K. joined the EEC and this should lead to a dismantling of EFTA and wholesale enlargement of the EEC with visions of a United States or Western Europe in the not too distant future.

## General Agreement on Trade and Tariffs

The General Agreement on Trade and Tariffs (GATT) came into force in January 1948. GATT is a multilateral treaty, subscribed to by over 80 governments which together account for more than four-fifths of world trade. It is the only multilateral Instrument that lays down agreed rules for international trade. For the past 25 years GATT has also functioned as the principal international body concerned with negotiating the reduction of trade barriers and with international trade relations. GATT is thus both a code of rules and a forum in which countries can discuss and overcome their trade problems and negotiate to enlarge world trading opportunities. The uninterrupted and fivefold growth in volume of international trade in the quarter-century of its existence has provided continuing evidence of GATT's success in this double role.

GATT entered into force in January 1948. Since that time, its membership has risen from its original 23 countries to the present figure of 83, while a further 16 countries also apply its rules to their trade. GATT's rules govern the trade of its member-countries and the conduct of their trade relations with one another. The contractual rights and obligations which it embodies have been accepted voluntarily, in their mutual interest, by the member-countries. Overseeing the application of these rules is an important and continuing part of GATT's activities. GATT is also a place where countries negotiate and work together for the reduction of trade barriers, in pursuit of its constant and fundamental aim of the further liberalization of world trade. In successive multilateral negotiations in GATT, obstacles to trade have been progressively reduced.

### RULES FOR TRADE RELATIONS

GATT has laid down a framework of rules for trade relations:

- (i) **Trade without discrimination.** The first principle, embodied in the famous "most favoured-nation" clause, is that trade must be conducted on the basis of non-discrimination. All contracting parties are bound to grant, to each other, treatment as favourable as they give to any country in the application and administration of import and export duties and charges. Thus no country is to give special trading advantages to another: all are on an equal basis and all share the benefits of any moves towards lower trade barriers. Exceptions to this basic rule are granted only in certain special circumstances.

Regional trading arrangements, in which a group of countries agree to abolish barriers against imports from one another, have been established in many parts of the world in recent years. The General Agreement recognizes, in Article XXIV, the value of closer integration of national economies through freer trade. It therefore permits such groupings, as an exception to the general rule of most-favoured-nation treatment, provided that certain strict rules are met. The rules are intended to ensure that the arrangements facilitate trade among the countries concerned, without raising barriers to trade with the outside world.

Regional trade groupings may take the form of a customs union or free trade area. In both cases, duties and other barriers to substantially all trade between countries in the group are required to be removed. In a free trade area, each member maintains its individual commercial policy, including its tariff towards non-members. A custom union adopts a unified customs tariff towards non-members. In either case, duties or other regulations affecting trade of members of the group with non-members are required to be no more restrictive than those which were applied before the group was set up. In order to prevent erosion of the most-favoured-nation rule, Article XXXIV also requires that interim agreements intended to lead to the formation of a customs union or free trade area should include a plan or schedule showing how this will be achieved.

Among regional trading arrangements examined in GATT under Article XXIV have been the European Economic Community (EEC), including its enlargement in 1973, the European Free Trade Association (EFTA), the Latin American Free Trade Association, the free trade areas between Australia and New Zealand and between Ireland and the United Kingdom, and the various associations, free trade and other agreements concluded between the EEC or EFTA and a number of countries.

GATT discussion of these arrangements, often controversial, has usually focussed on whether they will, as required, lead to removal of barriers to substantially all trade taking place between the countries in the group.

About two-thirds of the member-countries of GATT are in the early stages of economic development. GATT recognizes its responsibility, as the organization under whose rules the greater part of world trade moves, to assist their economic growth. GATT follows a twin approach to the problems of trade and development.

In the first place, the developing countries take a full part in its general work. Their presence underlines not only their determination to promote their own trading interests but also their recognition that the success of their own efforts to promote their economic development is closely linked with the continued expansion of world trade. This expansion of trade in turn is largely dependent on GATT's success in its efforts to open up world markets. In the second place, a number of the particular problems of developing countries are tackled through GATT bodies set up for this purpose. The aim is to follow up all possibilities that may be identified for opening new trading outlets for these countries.

- (ii) **Protection through tariffs.** A second basic principle is that protection should only be given to domestic industry through the customs tariff, and not through other commercial measures. The aim of this rule is to make the extent of protection clear, and to make competition possible.
- (iii) **A stable basis for trade.** A stable and predictable basis for trade is provided by the binding of the tariff levels negotiated among the contracting parties. These bound items are listed, for each country, in tariff schedules which form an integral part of the General Agreement. Although provision is made for the re-negotiation of bound tariffs, a return to higher tariffs is discouraged by the requirement that any increases be compensated for; consequently this provision is invoked rarely.
- (iv) **Consultation.** Consultation, to avoid damage to the trading interests of contracting parties, is another fundamental principle of GATT. Large and small countries alike can call on GATT for a fair settlement of cases in which they feel their rights under the General Agreement are being withheld or compromised by other members. If a country believes that benefits that should accrue to it under the Agreement are being nullified or impaired, or that attainment of any objective of the Agreement is being impeded, it may seek consultations with the parties concerned.

If these consultations do not lead to a satisfactory adjustment, a complaint may be lodged. Such a complaint must be promptly investigated. Recommendations or rulings under Article XXIII are then made by the GATT contracting parties acting together. If the circumstances are sufficiently serious, the injured country or coun-

tries may be authorized to suspend to an appropriate extent the application, towards the other party or parties to the dispute, of concessions or other obligations under GATT. In such disputes, GATT has often made use of Panels of Conciliation to investigate and make recommendations. These panels, whose members are chosen from countries which have no direct interest in the matter, have frequently been successful in helping the parties concerned to reach agreement.

- (v) **The "waiver" and possible emergency action.** There are "waiver" procedures whereby a country may, when its economic or trade circumstances so warrant, seek a derogation from a particular GATT obligation or obligations. There are also escape provisions for emergency action in certain defined circumstances. In certain carefully-defined circumstances, Article XIX of the General Agreement permits a member-country to impose import restrictions or withdraw past tariff concessions on products which are being imported in such increased quantities or under such conditions that they threaten serious injury to competing domestic products. This "safeguard" provision has been invoked on relatively few occasions, although, countries have not infrequently used other safeguard techniques.

GATT has done very useful work in focussing attention on non-tariff barriers and quantitative restrictions on imports. Tariff rates are generally published, and take much the same form in all countries. Non-tariff measures, however, differ greatly in their nature. Justification and intent, and correspondingly action to remove them, or to reduce their trade-hampering or trade-distorting effects, will vary from case to case.

### NON-TARIFF MEASURES

The GATT has collected the first comprehensive catalogue of non-tariff measures, by inviting member-countries to notify all such measures affecting their trade. Some 800 notifications were received, examined and divided into five broad categories:

- (1) **GOVERNMENT PARTICIPATION IN TRADE** (production and export subsidies, counter-vailing duties, government procurement practices, restrictive practices and state trading).
- (2) **CUSTOMS AND ADMINISTRATIVE ENTRY PROCEDURES** (anti-dumping duties, valuation, customs classification, customs and consular formalities, etc.)
- (3) **STANDARDS** involving imports and domestic goods (technical or testing requirements imposed for health, safety or other reasons; packaging, labelling and marking rules).
- (4) **SPECIFIC LIMITATIONS** on imports and exports (quantitative restrictions, bilateral agreements, export restraints, licensing, etc.)
- (5) **RESTRAINTS ON IMPORTS AND EXPORTS THROUGH THE PRICE MECHANISM** (prior deposits, variable levies, border tax adjustments, etc.)

Altogether, some 27 categories of non-tariff measures were identified. Agreement in principle has been reached on the kinds of solution appropriate to minimize or overcome many of these. Even before the multilateral trade negotiations opened, experts had worked out draft "ad referendum" solutions covering certain types of measure: draft codes of conduct have been prepared that could overcome difficulties raised by the administration of import licensing systems by differences in customs valuation methods, and by technical standards and regulations which have a trade-restrictive effect. In the course of the multilateral negotiations, governments will decide whether to adopt these draft solutions and will also try to negotiate agreed solutions for other categories of non-tariff measures.

### QUANTITATIVE RESTRICTIONS

A general prohibition of quantitative restrictions in a basic provision of GATT, which was established at a time when they were widespread, and were perhaps the greatest single obstacle to international trade. Today, quantitative restrictions are fewer, and of lesser significance. Nevertheless, they remain fairly numerous, and particularly affect trade in agricultural goods, textiles, and certain other non-agricultural products of export interest to developing countries. Quantitative restrictions on imports have been subject to scrutiny in a special working group and are an important target of the new multilateral negotiations.

The main exception to the general GATT rule against quantitative restrictions allows their use in balance-of-payments difficulties. Even then, restrictions must not be applied beyond the extent necessary to protect the balance of payments, and must be progressively reduced and eliminated as soon as they are no longer required. This exception is broadened, for developing countries, by the recognition (in Article XVIII of GATT) that the demand for imports generated by development may require them to maintain quantitative restrictions in order to prevent an excessive drain on their foreign exchange reserves.

Regular consultations in GATT are held with countries that maintain import restrictions for balance-of-payments reasons, and countries introducing new restrictions, or intensifying existing restrictions, are also required to consult. Any member which considers that another country is applying restrictions inconsistently with GATT rules, and that its trade is being harmed, has the right to bring the matter up for discussion and to ask for redress. Consultations allow an exchange of views on the problems facing the countries resorting to restrictions, as well as on the difficulties created for exporting countries, and may lead to recommendations for appropriate action by the country maintaining restrictions. GATT relies on the International Monetary Fund for findings on questions concerning foreign exchange, monetary reserves, and balance of payments.

In the last few years GATT has devoted relatively more attention to the problems of developing countries and it is no longer tarnished with the image, perhaps an exaggerated one, of being a club where the rules of the game were heavily weighed in favour of the industrialised nations and operated rather unfairly on the primary producers.

### **United Nations Economic and Social Council and United Nations Conference on Trade and Development**

No two international organisations have done more to focus attention on the problems of world trade, particularly those relating to developing countries, than the ECOSOC over a period of over two decades and the UNCTAD over the past decade. The efforts of both these international organisations have been to create conditions which would not only lead to a freer flow of international trade but also to just and equitable relationship between the prices of industrial goods and primary products, thus ensuring that the benefits of international trade are widely dispersed the world over. In fact UNCTAD was established in 1964 by the UN General Assembly after 10 years of strenuous efforts by the developing world in the ECOSOC and the UN General Assembly to secure a specialised agency which would adopt a coordinated approach to Trade and AID.

The energy crisis and the sixth special session of the United Nations General Assembly, called in April 1974 to discuss the problems of raw materials and development, highlighted in a dramatic context the work of the United Nations Conference on Trade and Development (UNCTAD).

It was in 1961 that the General Assembly of the United Nations adopted a resolution entitled "International trade as the primary instrument for economic development", stating it was "essential that countries should ensure the maximum expansion of their trade and an increase in their foreign exchange income". Whilst the developed countries were achieving this trade expansion—some of them in a quite spectacular way—the developing countries were lagging behind, leaving a widening gap between living standards in the rich and in the poor countries. Keenly aware of the fact that "universal peace and prosperity are closely linked and that the economic growth of the developing countries will also contribute to the economic growth of the developed countries", the General Assembly convened, in 1964, a conference on trade and development.

This conference constituted the first attempt to chart the strategy of a new global approach to international economic relations, and led to the establishment of UNCTAD as a permanent body. During the ensuing 11 years UNCTAD has become a major forum in which international development problems are debated and in which the developing countries are able to press for appropriate changes.

In fact, the majority of the developing countries of Latin America, Africa and Asia, comprising a large proportion of the world's population, has only a small and declining share in international trade. If these countries are to buy from the industrialized nations the machinery,

equipment, skills and services required to help their economic growth, they have to sell, at remunerative prices, the goods and raw materials they produce.

Foreign loans, grants and commercial credits provide only one-fifth of the currency they need for their purchases; the remaining four-fifths must be earned through trade.

Important initiatives to this end have been taken and UNCTAD had made a significant contribution to the study and rethinking of trade and aid policies so that they respond better to the needs of developing countries. Indeed, proposals considered revolutionary or unrealistic only a few years ago are now gaining international acceptance.

In the course of studies and discussions the following pertinent points have been stressed in UNCTAD forums:

- (I) The foreign earnings of most developing countries still mainly depend on the export of primary commodities, which constitute about four-fifths of their export trade. Since economic diversification and industrialization—which would lead to higher, internal consumption of the developing countries' natural resources and a greater mutual exchange of these resources—is a lengthy process one of their major preoccupations must still be to improve the terms on which their primary products are sold to the developed countries. For in exchange they need to import from the developed countries not only machinery, transport equipment, chemicals and numerous other manufactured goods, but also large quantities of foodstuffs and certain raw materials.
- (II) As exporters of primary commodities, developing countries face a number of major problems. The value of international trade in commodities has not grown as quickly as that of trade in manufactured goods, mainly because world market prices of commodities have, until recently, been rising more slowly than those of manufactures, but also—for some commodities—because of limited growth in the volume of this trade. This is basically a combined problem of access to markets and prices. Further, world commodity markets experience severe fluctuations and are vulnerable to speculative activities and foreign control of marketing and distribution systems. In addition, they face competition from synthetic and other substitutes for the natural product.
- (III) The volume and value of developing countries' exports of commodities could be increased if industrialized countries were to modify or abolish some of the devices—tariffs, quotas and such other obstacles to trade—and revise certain policies (such as subsidies) which support uneconomic production of primary commodities in their own countries.
- (IV) The problem of price is perhaps even more complex and difficult. Not only do commodity prices tend to lag behind those of manufactured goods but they also fluctuate far more widely. Greater price stability for commodities—in the sense of fewer and less violent fluctuations—would be welcome to both producers and consumers. It has proved difficult to find effective and acceptable ways of bringing this about, although some success has been achieved for a few commodities through international commodity agreements, using measures such as export quotas and buffer stocks. Several commodity agreements, including those on cocoa and tin—which are the only ones now in force containing provisions for regulating prices—have been negotiated or renegotiated under UNCTAD auspices.

In the past, commodity agreements have not specifically taken into account what has now become one of the developing countries' most urgent aims—to ensure that the prices of the commodities which they export rise at least as fast as the prices of the manufactured goods which they import. The theoretical and practical implications of this new approach are being intensively studied in UNCTAD.

- (V) Many natural products of export interest to developing countries (e.g., rubber, cotton, sisal) face mounting competition from synthetic substitutes. UNCTAD is surveying the needs and mobilizing international support for research and development designed to improve the competitiveness of natural products through reduction in production costs, improvement of natural characteristics and the finding of new end-uses.
- (VI) Manufactured and semi-processed goods constitute the most dynamic sector in world trade; their shares of world exports rose from 49 per cent in 1955 to 65 per cent in 1971. But the contribution of the developing countries to world exports of

manufactures had reached only 6 per cent by 1971—despite the rapid growth of such exports from developing countries in the preceding decade.

Although the increase in the price of petroleum and certain other primary products has improved the trade balances of some developing countries, this does not lessen the urgent need for the majority of them to increase their exports of manufactures and semi-manufactures. So far such exports have emanated from only a limited number of developing countries and, in spite of noticeable efforts in recent years to diversify manufacturing output and trade, such exports are still restricted to a small range of products. If processed food, synthetic fibres and refined petroleum are excluded, manufactures and semi-manufactures, including alumina, non-ferrous metals and diamonds, only accounted for 23 per cent of total export earnings of developing countries in 1971. In some developing countries and territories manufactures account for as high a proportion of total exports as in most developed countries, but in the majority of developing countries manufactures still make an insignificant contribution to export earnings.

Some of UNCTAD's specific achievements relate to: the generalized system of preferences, which favours the import into industrialised countries of goods manufactured by developing countries; commodity agreements, such as those for cocoa and sugar, which seek to stabilize prices for certain basic commodities; the Code of Conduct for liner conferences, aimed at protecting the interests of exporters who ship goods from developing countries; the establishment of a draft Charter of the Economic Rights and Duties of States; and the participation of the developing countries in negotiations concerning international monetary affairs. The developing world has high hopes from UNCTAD; these hopes will only fructify with the active cooperation of the developed world. UNCTAD is now in the forefront for establishing the New Economic Order.

## **Regional Cooperation for Development (RCD)**

The declaration of the Heads of State of Iran, Pakistan and Turkey establishing RCD was signed at Istanbul on July 21, 1964. It stated:

The Heads of State reaffirmed their belief that regional cooperation is an essential factor in accelerating the pace of national development and in contributing to peace and stability.

They expressed their conviction that the strong cultural and historical ties which bind the peoples of their countries and have already provided them with a solid basis for collaboration should be strengthened further and developed for the common benefit of the people of the entire region.

To this end, the Heads of State resolved that appropriate ways and means should be adopted to enlarge and develop further cooperation in their existing relations in all fields.

They unanimously expressed the belief that this new collaboration should be carried out in a spirit of regional cooperation notwithstanding their activities as members of other organization of a regional character. The activities planned within the present scheme of collaboration shall be carried out under the name of "Regional Cooperation for Development." The three Heads of State agreed in principle:

1. To a free or freer movement of goods through all practical means, such as the conclusion of trade agreements.

2. To establish closer collaboration amongst existing Chambers of Commerce and eventually a joint Chamber of Commerce.

3. To the formulation and implementation of joint purpose projects.

4. To reduce the postal rates between the three countries to the level of internal rates.

5. To improve the air transport services within the region and the eventual establishment of a strong and competitive international air line among three countries.

6. To investigate the possibilities of securing closer cooperation in the field of shipping, including the establishment of a joint maritime line or "conference" arrangements.

7. To undertake necessary studies for construction and improvement of rail and road links.

8. To sign at an early date an agreement with a view to promoting tourism.

9. To abolish visa formalities among the three countries for travel purposes.



- 10 To provide technical assistance to each other in the form of experts and training facilities.

Furthermore, the Heads of State have directed to explore all the possibilities for expanding cooperation in the cultural field among the countries of the region.

Cultural relations should be particularly oriented towards creating mass consciousness of the common cultural heritage, disseminating information about the history, civilization and culture of the peoples of the region, inter-alia, through the establishment of Chairs in Universities, the exchange of students, the granting of scholarships, the establishment of cultural centres and the joint sponsoring of an Institute for initiating studies and research on their common cultural heritage.

### COUNCIL OF MINISTERS

To initiate, formulate and promote various plans among the member countries, it was necessary that regular points of contact between the representatives of the member governments should be available. Accordingly, a hierarchy consisting of three organisations was devised to undertake the task of planning and decision-making within the RCD organization.

The Council of Ministers was set up to act as the highest decision-making body of the RCD. This is at the apex of this hierarchy and provides a point of contact between the member governments at the highest level. The Council considers and decides on measures for regional cooperation among the three member countries.

The Regional Planning Council, composed of the heads of Plan Organisations of the member countries, is the other permanent body which forms the second tier of this tripartite arrangement. The Planning Council was entrusted with the task of studying the development plans and production potentials of the three member countries of this region.

The Council makes recommendations on joint purpose projects and long-term purchase agreements and makes proposals regarding the harmonisation of the national development plans in the wider interest of accelerated regional development.

### PERMANENT COMMITTEES

The third tier is formed of Permanent Committees, each of which consists of representatives of the member countries, and thus provides the basic channel of contact between the Member Governments in a particular sphere of cooperation, i.e., Trade, Communications, Industry, Technical Assistance, Cultural Affairs, etc.

The key committee in the RCD set-up is the Coordination Committee which is composed of the national coordinators nominated by their respective governments. Ambassador Hosheng Batmanglidg from Iran and Tewfik Sirajoglu and Nurver Niks from Turkey have been outstanding coordinators of RCD activity.

There is a full-fledged Secretariat located in Tehran and headed by a Secretary General. Other RCD agencies are the RCD Cultural Institute, RCD Insurance Centre, RCD Chamber of Commerce and Industry, and RCD shipping services.

In the 5½ years or so between 21 July 1964 and the end of 1969 RCD took magnificent strides thanks to the political support, popular appeal, and cooperation at the working level which it enjoyed in this period. In mid-1969 when the late President Ayub had been forced to hand over power to the usurper Yahya Khan, a review had been prepared by the author on the progress of RCD activity. The salient features of the progress of RCD in the 5-year period 1964-69 were:

- (i) Fifty-five joint purpose enterprises have been approved. Of the approved projects 14 will be in production and exchanges of their products would commence in the current year, 8 other joint purpose enterprises would go into production by the end of 1970 or shortly thereafter. The rest will be in production by 1973 at the latest. Twenty-six studies on possible joint purpose enterprises will be completed by early 1970. The UNIDO Experts have been assigned the feasibility study of establishing RCD Heavy Engineering and Electrical Corporations in order to evolve an integrated

approach by the member countries. This is an impressive record of planning and is indicative of the will of the planners of the three RCD countries to explore and identify all possible projects of regional significance. The agreement on the promotion and operation of joint purpose enterprises was signed in Tehran on November 6, 1967. Under the aegis of RCD joint purpose enterprises can be undertaken in various forms such as joint ownership, either in the public and/or private sectors, ownership by one country or more for making supplies to the others, establishing production facilities in one country for which raw material is produced in the other, long term production agreements based on production facilities in any of the countries. If the private sector is interested in participating in a particular joint purpose enterprise, its application in the first instance has to be sponsored by the Government in which the private entrepreneur is located. Under joint purpose enterprises large and sophisticated industries are to be developed which can only be economic if they are based on the larger regional market as against the national market. This necessitates detailed studies on a large number of industries falling in this category. After the field of industry is identified, an elaborate project has to be prepared along with its feasibility report. Thereafter, Memorandum of Understanding and the Articles of Association are negotiated and then arrangements for financing the project are made. For these reasons, joint purpose enterprises cannot be established and visible results cannot be seen in a short period.

- (ii) UNCTAD Experts have been assigned a study on liberalisation and expansion of inter-regional trade in the RCD region. Administrative actions taken by the member Governments have encouraged intra-regional trade. The RCD Union for Multilateral Payment Arrangements has been established since July 1967 to facilitate the financing of the movement of trade within the region. The RCD Chamber of Commerce and Industry has been set up at Tehran in August 1965 to foster and develop intra-regional trade, and promote investment opportunities amongst the member countries.
- (iii) With a view to promoting tourism in the region an agreement amongst the member countries has been signed in 1964. Entry visas have been abolished in the RCD Region.
- (iv) The RCD Insurance Centre has been established at Karachi in 1965. The Five RCD Reinsurance Pools, namely Accident, Marine, Fire, Aviation and Engineering, are functioning successfully and have reduced the outflow of foreign exchange from the RCD region. The establishment of RCD Reinsurance Corporation is under the active consideration of the member Governments.
- (v) Postal rates on intra-regional mails and telecommunications has been reduced and a direct micro-wave link introduced in the RCD region. The work on RCD Highway linking Ankara-Tehran-Karachi is being intensified so that the RCD Highway could be completed at adequate standard as soon as possible. Iran and Turkey rail link will become operative in 1970. The Iran-Pakistan rail link on Kashan-Yezd-Kerman sector should be operative by 1970 and the Kerman-Zahedan sector would be surveyed by Iran shortly. The existing railway on the Quetta-Zahedan sector is in operation. The RCD Shipping Services is operating from US ports to the region and on intra-regional routes. The feasibility for establishing a Joint Shipping Company is under consideration by the member Governments. A study on the formation of a Joint International Airline operating supersonic and Large Supersonic aircraft is being assigned to an international Aviation Consultant. The proposed RCD airline would operate on an agreed international route and IRANAIR, PIA and Turkish Airlines will function in their present character.
- (vi) A RCD Cultural Institute has been set up at Tehran in 1966 with its branches at Istanbul, Dacca and Lahore. The Institute has completed 11 publications and another 4 are under print. The RCD Cultural Exchange Programme 1969 include the exchange of artists, journalists, sports teams, women delegations, exhibitions. A do-

cumentary film depicting art, culture and developmental aspects of the member countries is expected to be completed by the end of this year. Establishment of RCD College of Economics and Political Science at Islamabad, has been approved by the RCD Ministerial Council.

(vii) The RCD Programme of Technical Cooperation has been consolidated and expanded from year to year. The Third RCD Joint Course on Public Administration and Management in the Pakistan Administrative Staff College, Lahore, was scheduled for December, 1969.

(viii) Visas have been abolished and there is extensive travel amongst the people of the region.

The Council, at its Ninth Session held in early December, 1968, decided that in order to promote the objectives of RCD, every effort should be made by Member Governments to intensify their cooperation under four broad categories:

- (i) Promotion of industrial joint purpose enterprises whenever and wherever possible and practicable. It was this field of cooperation which makes possible harmonisation of production facilities, contributes to great expansion of intra-regional trade, and provides a surer and sound base for economic harmonisation.
- (ii) Liberalisation, promotion and expansion of intra-regional trade.
- (iii) Provision of a sufficient and economic system of transport and communications.
- (iv) Exchanges in the cultural and technical cooperation fields so as to strengthen the people-to-people relations.

The Council at its Ninth Session also expressed its satisfaction over the progress of RCD activity during the 4½ years. The Council expressed the view that the planning of RCD activity was well conceived, balanced, realistic and objective. The Council further observed that the fact that it has been possible to complete some of the planned joint purpose enterprises and to commence exchange of their products from 1969 was a tribute to the far-sighted and broad direction given by the Heads of State and Government at the Istanbul Summit.

While the RCD has not made much headway during the past five years, there is no need to be despondent, for according to all public statements it continues to enjoy popular and political support. Pakistan should try to ensure that the economic and cultural cooperation under the aegis of the RCD is maximised, subject, of course, of the availability of resources. The benefits of RCD cannot be measured in material terms alone as the philosophy behind it is of a much higher order. The establishment of RCD is an extremely important step towards the much higher and cherished goal of an integrated people, whose hearts beat in unison and are attuned to the call of "La Ilahah Illilah." While it is true that Man does not live by bread alone, it is equally true that he cannot live without it. The bread and butter part of this History in the making is provided by economic and cultural collaboration under the aegis of RCD. RCD should continue to be regarded as a Movement. Political and strategic considerations are indeed very relevant in this Cooperation.

RCD should be made particularly attractive for Turkey in order to induce the Turks to look eastward in their own enlightened self-interest. Similarly Iran should continue to be genuinely convinced that they have a firm reliable and mutually advantageous relationship with Pakistan in RCD. Every effort should be made to increase the quantum and improve the content of intra-regional trade.

A system of tariff preferences in the region should be established. The proposal has been under discussion for sometimes now. The need for such trade turnover in the region can only grow to the extent desired if a regime of preferential trade exchanges is gradually built up. An UNCTAD survey team also some time ago recommended the introduction of tariff preferences. Over the past two years, Pakistan, Iran and Turkey have shown a happy trend towards greater trade exchanges. Pakistan's exports to Iran and Turkey have, according to the State Bank of Pakistan, risen during ten months of the 1974-75 to Rs. 605.6 million as against Rs. 176.5 million during the corresponding period of last year, thus registering a rise of three-and-a-half times.

Approved joint purpose enterprises should be implemented expeditiously and delay should be avoided.

The "special relationship" which is sought to be promoted on a people-to-people basis under the aegis of RCD cannot be sustained unless the three countries give more favourable treatment to each other in comparison with others. The transport and communications network in the region should continue to be strengthened so as to provide the basic infrastructure necessary for deep and sustained collaboration. The Technical and Cultural Cooperation Programmes should be further intensified with a view to further promoting and strengthening the people-to-people relationship at all levels. In order to attain these objectives the requisite financial and administrative resources should be made available. The RCD Movement will succeed provided its sponsors show sympathy, understanding, forbearance and a measure of short-term sacrifice.

## BILATERAL COMMISSIONS

As of mid-1975 Pakistan had established bilateral Commissions with six countries with the purpose of fostering economic and cultural cooperation on a bilateral but institutional basis.

The first of these Commissions was the Indonesia-Pakistan Economic and Cultural Cooperation Organisation (IPECC) established in August 1964. The Secretariat established at Jakarta has been abolished, as have a number of joint ventures relating to the manufacture of aircraft, shipbuilding, oil exploration and other heavy industries. There has been an increase in trade between Indonesia and Pakistan and as of mid-1975 there was some activity to promote joint ventures. In the mid-1975 IPECC Council meeting the increase in bilateral trade and the "growth in cooperation between the news media and TV and Radio organisations" of the two countries was noted. Possibilities of joint ventures in such fields as shipping were also discussed and steps taken to institute preliminary studies on some of them. For instance, Indonesia is to prepare a feasibility report on the metal processing industry. The results of exploratory talks on joint projects in the sugar industry and railway sleeper manufacturing can be expected to be pursued in future meetings. The agreement on the manufacture of Pakistani bicycles in Indonesia (for which a letter of credit has already been signed) is an important outcome of the Ministerial meeting. On the technical side, a significant decision has been made to earmark 37 training and advisory-service programmes for implementation during 1975-76. These decisions should infuse new vigour into IPECC. Although established over ten years ago, IPECC has not been able to develop into the kind of effective partnership it was intended to be. There are many reasons for this, the main ones being the absence of regular meetings and lack of follow-up measures to implement schemes finalised earlier.

An earnest beginning has now been made towards realising the original objective underlying the formation of IPECC, which raises the hope that it would soon become a viable mechanism for giving early tangible shape to the mutual will for co-operation. The complementary nature of the economies of Indonesia and Pakistan is a favourable factor of which both should try to derive the maximum advantage. What is now needed is that the new effort mounted to achieve many-sided co-operation within the frame-work of IPECC should not be allowed to flag, and permanent machinery should be set up to ensure the implementation of decisions taken at Ministerial meetings.

## LIBYA-PAKISTAN

On the 28th February, 1974, Prime Minister Bhutto and Colonel Muammar Gaddafi, Chairman of the Revolutionary Command Council of the Libyan Arab Republic, signed an agreement for general cooperation between the two countries and set up a Joint Libya-Pakistan Ministerial Commission. This was followed by a Protocol on Economic, Cultural and Social Cooperation which was signed on 25th of April, 1974.

Pakistan and Libya agreed to set up a Joint Shipping Company with a share capital of \$20 million, a convention for the avoidance of double taxation with respect to taxes on income, free movement of capital between the two countries, establishing a Joint Investment Banking Corporation, and a joint Publishing House for publishing books on Islamic heritage. A great stimulus to export of books will be provided with the establishment of the Pak-Libya Publishing House in the near future. In this joint project with the Libyan Arab Republic, the National Book Foundation will represent the Government of Pakistan. The capital cost of the venture will

be Rs. 55 million of which Rs. 40 million worth of printing equipment will be imported for the Pak-Libya Publishing House at Karachi, with computerized composing, electronic separation of colours, the most modern book printing machines and highspeed automatic binding. With the establishment of this Press—the best equipped in Asia—not only will national needs be satisfied but Pakistan will also be able to meet the textbook needs of the Middle East, Muslim North Africa, East Africa and the People's Republic of China.

Investment in equity capital, development loans or technical assistance are also foreseen. The Libyan Arab Republic will facilitate the participation of Pakistani consultants and other firms in the preparation, appraisal and implementation of its development projects and programmes. The two Governments also agreed to the establishment of a joint Pakistani-Libyan Arab Republic Chamber of Commerce and Industry.

### SAUDI ARABIA-PAKISTAN

In May, 1974, it was agreed to set up a Joint Ministerial Commission between Pakistan and the Kingdom of Saudi Arabia. The Commission would hold its meetings after every alternate six months in Riyadh and Islamabad. Both the parties agreed on increasing cooperation between them in various economic, scientific and cultural fields. In order to attain this objective it has also been decided that the experts of the two countries will hold frequent meetings.

### IRAN-PAKISTAN

During the visit of Prime Minister Bhutto (then President) to Iran, in May, 1973, it was decided "to set up a Joint Commission between Iran and Pakistan at Ministerial level which could meet at least once a year and oftener, if necessary, to promote trade and identify areas in which the two countries could jointly collaborate, decide the form that such collaboration should take and oversee and facilitate the smooth implementation of decisions taken in that regard." It has since agreed to the establishment of textile mills, cement factories and meat farms in Pakistan on a joint venture basis. These facilities will be located mostly in Baluchistan.

### KUWAIT-PAKISTAN

An Economic Agreement was signed between Kuwait and Pakistan, in November, 1972, for furthering and promoting economic cooperation between the two countries. They agreed to provide necessary facilities to nationals and corporate bodies for the investment of capital in accordance with the regulations and laws in force in each of them. A mixed commission composed of representatives of the Contracting Parties was established to supervise implementation of the Agreement, and meetings will be held alternately in Kuwait and Islamabad.

A joint Ministerial Commission has also been set up with the United Arab Emirates and a Protocol signed for Economic, Social and Cultural Cooperation.

### SRI LANKA-PAKISTAN

In September 1974, during the visit of the Prime Minister of Sri Lanka, an agreement was reached to set up a **Pakistan-Sri Lanka Joint Economic Committee** for the promotion of economic cooperation between the two countries. The relevant paragraph of the Joint Communiqué states:

"The two Prime Ministers expressed deep satisfaction over the manifold expansion of trade between the two countries and agreed that the happy trends should be consolidated and strengthened. Towards this end and to promote cooperation between the two countries in the field of economic development, the Prime Ministers decided to establish a Pakistan-Sri Lanka Joint Economic Committee which would meet periodically."

## Nature and role of Foreign Aid

Foreign aid does not necessarily connote a grant or a transfer of resources occasioned by the generosity of the donor who may be impelled by motivations relating to salvaging his moral or social conscience. The honeymoon period of the under-developed world with the industrialized West, when foreign aid largely assumed the shape of outright grants and gifts, has been over for quite some time. International credits are generally made available on commercial rates and it would be wrong to classify them as foreign aid. Actually foreign aid would consist of only those explicit transfers of real resources to the developing countries which are given on concessional terms. Unless the resources so transferred involve to a certain degree more favourable terms than those available commercially, there is no aid element involved. The maxim "fair exchange is no robbery" cannot be applied to an aid transaction since the crux of foreign aid is the provision of resources on concessionary terms which would not be available on a pure and simple commercial basis.

Foreign aid can be broadly classified into four categories:

- (i) Project aid which is given in the form of equipment and goods for the implementation of agreed development projects;
- (ii) Commodity aid which is used to supplement national resources available for procuring imported industrial raw materials, spare parts and accessories, tools and implements, and things like fertilisers, insecticides and pesticides;
- (iii) Food aid which consists of items relating to food such as wheat, edible oil, powdered milk and tobacco (in the early years food aid was mostly given as a grant and the counterpart funds generated by the sale of these goods were utilized to meet the local cost of agreed development projects); and
- (iv) Technical assistance in the form of training facilities, experts and equipment for training, research and pilot projects.

Even at the expense of repetition it would be worthwhile recalling the necessity of foreign aid for the development of under-developed countries. Almost all these share certain common characteristics: there is very little capital formation; industrial development is at best marginal; agriculture is primitive and the rural areas are inhabited by the bulk of the population are poor in terms of development; the economic and social infrastructure (education, power, ports, roads and railways) so vital for economic development is extremely inadequate; and finally their exports are by and large dependent on one or two agricultural raw materials which suffer from violent international fluctuations with regard to both price and demand. Their balance-of-payments position is critical; their combined adverse balance of payments rose to 35 billion dollars in 1975 as against 9 billion dollars three years earlier. These countries need an injection of foreign resources to break the vicious circle of low-income-low investment-low-production as a result of a long period of economic stagnation. The extent of impoverishment in many developing countries, the fast-growing demand for a welfare State engendered by the rising expectations of the people, the increasing capital-intensive nature of modern economic processes and the greater contact of the higher social groups with their counterparts in the highly prosperous developed world make it unlikely that open economies operated democratically would find internally all the possibilities for growth. This increases the necessity of massive injections of foreign resources to stimulate growth.

The World Bank in a report published in mid-1975 has once again focussed attention on the urgency of the problem. The poorest 1,000 people in the world will see their real income rise less than 1 per cent between 1975 and 1980. There has been no increase in average real income in these countries in 1974-75. For those developing countries with an annual per capita income of less than 200 dollars the projections are even gloomier and their real income may at best grow by less than 1 per cent for nearly the rest of the decade. It so happens that the economies of the poor nations are largely governed by factors over which they have no control, like the volume of foreign aid and the prices of commodities and manufactured goods. It is only by a massive transfer of capital that the average growth rate of developing countries can be raised to a figure of 6 per cent per annum by the end of 1980 so as to provide a measure of improvement in

living standards after taking care of the growth in population. The world Bank is not optimistic about this massive transfer of money for two reasons:

- (i) the surplus in the current balance of payments of the industrialized countries of the West would not rise significantly by the end of the decade and some of these countries may even record a deficit;
- (ii) if the 6 per cent target has to be obtained from aid under conditions that do not hurt the advanced countries, this aid should rise to 0.81 per cent of their GNP in 1980 as against 0.33 per cent in 1974, and the actual prospects are that it might even fall to 0.24 per cent of GNP.

The World Bank has stressed that the removal of tariff barriers against the basic exports of developing countries could well account for an increase in their external resources to the extent of half the financial resources required for increasing their rate of growth by 6 per cent. This would require more liberal practices by developed countries for the importation of manufactured goods which are essential to the long-term growth prospects of the developing countries.

The World Bank projections indicate that the exports of manufactured goods by the poor nations could rise by 15 per cent between 1976 and 1980 if the growth rate is 6 per cent in the advanced nations making up the Organization for Economic Cooperation and Development(OECD). It has, however, been stressed that a favourable treatment of these exports was not enough to meet the long-term requirements for the least privileged section of mankind because developing countries with an annual per capita income of more than 200 dollars per annum would be the chief beneficiaries of export expansion and trade liberalization. Thus the long-term development for the 1,000 million lower income peoples would require the provision of much larger capital flows on concessional terms. To sum up: foreign aid enables the economies to grow faster by promoting a growth of investment which is more rapid than that which domestic savings can support. This is because a contribution of real resources on concessionary terms represents a real addition to total resources which can be used to promote development. A high rate of economic growth leads to a higher level of domestic savings and this, in turn, moves the country towards a process of growth which is more self-supporting.

The transformation of a poor country with a low rate of growth or no growth at all into one capable of an adequate sustained growth rate is the essence of the *raison d'être* of foreign aid. Higher rates of growth require an improvement in the skills of the labour force, a growth in capital stock, and considerable changes in the composition of output along with changes in attitudes and institutions. The role of foreign aid is primarily to remove the constraints on growth in a country which would otherwise, be wholly dependent on domestic resources. Foreign aid would have to be concentrated on those parts which constitute the dominant constraints on growth, whether they be savings, availability of foreign exchange, skills, attitudes or institutions. It should be emphasised that these constraints are of varying intensity in the various developing countries. The most powerful constraints to growth is the level of domestic savings and foreign aid has to supplement domestic savings to permit higher investment and growth. The second major constraint is the availability of foreign exchange to finance not only economic development but the new pressures on imports following an upsurge of economic activity.

This problem has been discussed in details in the trade section but it needs to be emphasised once again that the restricted access to markets in the developed world, inelastic foreign demand curves, and the pressure of domestic demand hamper the development of exports to the level necessary for economic growth and sustenance. The absence of skills at all levels, the general apathy reflected in the attitudes of the peoples and the absence of institutions (both administrative as well as economic) which are a necessary prerequisite for economic growth are serious constraints on the ability of developing countries to accelerate their development, and they should by no means be overlooked.

Skills can be improved by investment in education and by training people. The development of institutions takes time except perhaps in the old British colonies where there existed an adequate administrative infrastructure. Attitudes represent a more difficult problem and they take a much longer period to be resolved. Habits and attitudes die hard and it might well take a couple of decades before people can be persuaded to change attitudes that are disruptive to

progress and welfare. While it is true that a substantial part of bilateral aid has been extended to achieve political favour or gain military advantages, or promote exports, there has been a considerable amount of the good Samaritan factor in the dispensation of institutional and bilateral assistance. There has also been rather too much attention on an individual investment project and relatively little on the causes and results of stagnation in the economy. Again, the donor as well as the recipient countries have expected too much too soon as a result of the national development effort being supplemented by foreign aid. It was too much to expect dramatic changes in the lives of hundreds of millions of people from a relatively modest flow of resources, a substantial part of which was upset by unfavourable trends in the terms of trade. The impact of external assistance depends largely on the efficiency with which the recipient country uses its own resources as also on its economic and social policies.

Whether one likes it or not, the fact remains that an aid relationship requires the acceptance of a continuing review of performance by the donor agency, and one can reasonably expect that in an underdeveloped country with a sound administration, the donor will not be able to exercise political or economic pressures on the recipient country. In weaker administrations the danger is always there. Effective foreign aid requires a greater measure of continuity than is assured at present. "He who pays the piper calls the tune" is an old adage, and thus developing countries which are heavily dependent on external assistance and yet do not dance to the tune of their paymasters, deserve high commendation. Although it is said that, generally speaking, political strings are not tied to aid yet the donor does have an axe to grind even if all that it amounts to is to create a better world in which he, his interests and his ideology are well protected.

## PEARSON REPORT

The Pearson Commission justified aid not as a guarantee for ensuring a particular ideology or value system, not as a guarantee of political stability or an antidote to violence, not to close all gaps and eliminate all inequality, but because it is only right for those who have to share with those who have not.

The Pearson Commission kept as its objective a durable and constructive relationship between developing and developed nations in a new interdependent world community, and they expressed the belief that international cooperation for development, soundly conceived and wisely executed, can make an essential contribution to the achievement of this objective. The Pearson Commission expressed the view that the strategy for the strengthening of international cooperation for development should cover the following principal objectives:

- i) to create a framework for free and equitable international trade;
- ii) to promote mutual beneficial foreign private investment;
- iii) to establish a better partnership, a clearer purpose, and a greater coherence in development aid;
- iv) to increase the volume of trade;
- v) to make aid administration more effective;
- vi) to redirect technical assistance;
- vii) to slow the growth of population;
- viii) to revitalize aid and education; and
- ix) to strengthen the morality of aid assistance.

The developing countries, which number more than 100 with a total population of about two-thirds of mankind, do need a concerted programme of cooperation in which the developed and the developing countries are partners in development. A situation in which 66 per cent of the less developed world only enjoys 12.5 per cent of the total GNP of the world cannot last for long without causing intolerable tensions and frictions. Of course, improvement in living standards will not be handed over to the developing world on a silver platter; they will have to work very hard; impose a certain measure of self-discipline, and adopt pragmatic and rational economic and social policies which are not hedged by the compulsions of popular slogans.



## TOLL OF INFLATION

Inflation has taken its toll of foreign aid. Despite the reality of recession, development aid from the industrial nations rose by 21 per cent in 1974 to \$11.3 billion. After deducting for inflation, the developing countries received only a little more finance than in the previous year, and that too in a year when most of this had to meet soaring bills for oil and industrial equipment and industrial raw materials. The aid extended by the OECD (Organization for Economic Cooperation and Development) to developing countries came to \$5.60 per head in 1974. Ten years earlier it was \$3.70 per head but in real terms per capita aid has declined by over 20 per cent. The West is becoming just one of the aid donors, albeit still the biggest. Commitments by the oil producers, who made about 60 billion more on their oil last year came to \$7½ billion. Now Iran and Saudi Arabia, both giving over \$2 billion in aid, are second and third respectively after the US (\$3½ billion) in the world aid league. Kuwait and the United Arab Emirates are just behind France, Germany and Japan.

The real cost of foreign aid depends on the terms at which the monetary flows are provided. If the aid is in the form of grants then the nominal value and the real value will be identical since the donor has foregone the use of those financial resources for ever. If foreign aid is in the form of a loan the lender initially loses the use of these resources but his enjoyment of them is only postponed since the loan will be repaid in future instalments and the lender will also receive interest payments. Hence the real cost of foreign aid to the lender is the difference between the present value to the lender and the future value of repayments and interest as well as the magnitude of initial loan. The current value of an aid loan will thus depend on the rate of interest charged relative to the rate of return on investment in the donor country and the period of repayment of the aid loan. The higher the rate of return to the donor country, as compared to the rate of interest on the aid loan, the greater will be the opportunity cost to the donor. Again, other things being equal, the longer the period of loan the greater will be the cost. Thus low interest loans repayable over a long period of years are far more favourable from the point of view of the recipient countries as compared to medium term loans which carry a rate of interest, which though lower than that prevailing in that country, is still fairly high.

The extent to which foreign aid is tied to procurement of goods in the lending country may also effect its value to the recipient country and its cost to the lender. Loans which are tied to use only in the donor country reduce their value to the borrower as against those in which the funds could be used to buy goods from the cheapest or most preferred international sources. Although the tying of aid generally reduces the value of the loan to the recipient it does not necessarily reduce the cost to the lender. The real cost of aid is reduced if aid is tied to surplus capacity in industry in the donor country. The more concessionary the terms relating to the transfer of funds the greater is the attractiveness in the use of foreign aid and the lesser is the future burden imposed on the developing country.

It is sometimes maintained that there is a limit to the foreign aid absorption capacity of some developing countries. For this two reasons are cited: (i) ability of developed countries to absorb additional funds for productive development purposes which depends on the number and size of sound projects which can be brought to a point where they are suitable for foreign aid financing and on the professional and skilled manpower necessary to execute the projects; and (ii) ability of developing countries to service additional external debts which would depend on the increase in domestic production and exports to an extent large enough to finance the payment of interest and instalments of principal on their external indebtedness. The danger point is reached when debt servicing charges exceed 25 to 30 per cent of the country's current export earnings.

Project aid, commodity aid, food aid and technical assistance have their own justified priorities in the overall flow of external assistance.

## PROJECT AID

Project aid is necessary to provide a substantial part of the capital cost and in a majority of cases almost the entire foreign exchange component of the project. Most Projects in develop-

ing countries would not be set up if it were not for the availability of projects aid. It should be emphasised that the necessity of obtaining aid makes it incumbent on the recipient country to present only worthwhile projects which are feasible and which fit in to the overall priority plan; unsound projects or those which just satisfy the whims of the powers that be are thus scrapped because they do not fulfil the rigid criteria laid down by the donor agencies. In this manner an external source is able to check the internal projections relating to the impact of the project on the economy of the country concerned which include increase in production/productivity, employment, export potential, import substitution, revenue raising and social effects. Project aid not only provides the financial wherewithal to implement the project but in addition it enables the project to be subjected to a severe expert re-evaluation. The selection and implementation of worthwhile projects improves the economy and its creditworthiness and makes the servicing of the debt so acquired relatively less burdensome.

### COMMODITY AID

Commodity aid has come into fashion after the developing countries discovered that they could not meet the additional requirements of imported raw material and spares which they desperately needed to utilise fully their installed productive capacity. This imported material was not only required for their newly established industrial sector, but power, transport and communications, and above all agriculture made huge recurring demands on foreign exchange resources to keep the productive process in full swing, to production, and finally to increase productivity. The huge increase in demands for fertilizer, tractors, insecticides and pesticides was directly related to increasing agricultural production and productivity. Industrial inputs like iron and steel, chemicals, and a wide assortment of raw materials for electrical and engineering needs had to be provided to sustain industrial growth. The transport and communications sector had to be well maintained and provided with additional foreign exchange following the increase in economic activity. Commodity aid is justified on the grounds that it enables increased production and productivity, increases the export availability of commodities and manufactured goods, assists in import substitution on a large scale, increases employment, and significantly contributes to raising governmental revenues. Besides all this, commodity aid provides the much needed balance of payments support.

### FOOD AID

Food aid can best be justified on humanitarian grounds; the economic and social impact of food aid does not need any great elaboration except to say that deprivation of this prerequisite of human existence can cause a national calamity. During the fifties food aid was generally given as a grant and this assisted the recipient country in more ways than one; it also provided badly needed budgetary support through the availability of additional domestic monetary resources obtained through the sale of food items obtained under aid.

On the negative side the provision of food aid led to the development of a feeling of complacency about the internal food situation and the recipient countries did not give the importance to domestic food production which it rightly deserved. During the past decade and a half food aid has been extended on terms which are generally more concessionary than those given for project or commodity aid. Nevertheless food aid does mortgage the future export earnings of the country and this can become a severe strain if the domestic economy has to be in chronic deficit so far as its food requirements are concerned.

### TECHNICAL ASSISTANCE

Technical assistance is an extremely important integral part of foreign aid. The transfer of technology from the industrialised world to the developing countries is also considered as a part of technical assistance although in this case the recipient country has to pay for it either in cash, or through commercial credits, or hopefully through loans obtained on concessionary terms. Developing countries are also extending technical assistance to one another within the

limits of their available resources and technical expertise, notably under the Colombo Plan for cooperative economic development in South and South East Asia. This is an interesting phenomenon inasmuch as it represents a sincere effort on the part of the more developed amongst the developing countries to freely share whatever expertise they can spare with their developing countries who need it.

The United Nations family which includes the World Bank group, IMF, World Health Organization (WHO), UNESCO, ILO, UNICEF and UNDP have played a most commendable role in providing technical assistance to the less developed countries. And so have almost all the developed countries of the world and large private philanthropies such as the Ford Foundation in the United States.

Much technical assistance has no direct link with capital assistance, even though it facilitates indirectly the effective utilisation of both domestic and external capital resources. It may begin before capital aid is provided in large quantities and may continue after capital aid has been terminated. Technical assistance can, in practice, be divided into four main groups:

- (a) **ad hoc** advisory assistance,
- (b) broader programmes of support for education and public services,
- (c) integrated technical assistance in support of an institution,
- (d) technical assistance providing direct support for major capital projects.

Purely advisory assistance is used selectively, in cases where the pre-conditions clearly exist for implementation of the advice provided. It is normally confined to the upper levels of policy-making. For some years many countries will require substantial amounts of broadly based technical support. This is so in the earlier stages of development, up to the point where their national educational and training systems are capable of keeping pace with requirements.

The reinforcement of local institutions requires greater flexibility in aid methods, covering:

- a) the award of technical assistance grants for study and training in local institutions;
- b) the more extensive supply of equipment for local training institutions, particularly where this is linked to the provision of teaching personnel;
- c) the meeting for a limited period of time of part of the local operating costs of selected institutions, such as local staff salaries and research costs;
- d) the building of continuing links between similar institutions in developed and developing countries (e.g. professional bodies, universities and higher technical institutes, co-operative organisations, local government authorities), if necessary with support from aid funds.

A larger proportion of technical assistance should be concentrated on clearly defined projects and related to specific institutions. This should be provided on an integrated basis, i.e., as long-term, phased support making use of all the appropriate forms of technical and capital aid. The integrated approach should be applied equally to technical assistance in support of capital projects covering the phases of preparation, execution and follow-up. This will require joint advance planning amongst aid agencies concerned respectively with financial and technical aid.

There are a number of obstacles of an administrative, financial, social and political character to the absorption of technical assistance which can be reduced by appropriate measures:

- a) the administrative burden on recipients can be cut down by better local co-ordination, long-term planning to meet future requirements and, especially, the simplification and harmonization of aid procedures by the donors;
- b) the financial burden can be reduced by providing more operational personnel (thus obviating the need for scarce "counterparts"), by meeting certain local costs from aid funds and by salary "topping up" arrangements;
- c) the social and political obstacles can be minimised by cutting back on special privileges for experts and by blocking part of their salary payments.

There are certain deficiencies in the existing pattern of international technical cooperation. These include the inability of some experts to impart their expertise adequately to local personnel, the expert's unfamiliarity with conditions in recipient countries, cultural differences, administrative delays, inadequate counterpart arrangements, training courses which are not specifically tailored to meet the needs of recipient countries, the failure to link assistance meaningfully to development plans, and the failure to phase out technical assistance within the specified period.

The transfer of technology to the developing countries has assumed huge dimensions owing to the need for accelerated development and the emergence in the seventies of the stupendous oil wealth of a few developing countries, coupled with their desire to move forward at a maximum pace. The importance of technical progress for economic growth has long been recognized and adequate access to technology, no matter where it has been developed, constitutes one of the most important facets of the development process. Seen in a historical perspective, the technological gap between developed and developing countries is of relatively recent origin and the income gap is largely a reflection of this technological gap. Technical progress is not merely the result of indigenous evolution, but one of significant transfers across geographical, political and cultural frontiers.

In this technological exchange the developing countries are inherently in the position of unequal partners. They rely to a great extent on imported technology for their development needs, and, given their economic and technological weaknesses, the transfer of technology is usually a one-way flow from the developed to the developing countries.

The UNCTAD secretariat's estimates show that direct foreign exchange costs of the transfer of technology to developing countries amounted to some \$ 1.5 billion in 1968 and that these costs are likely to grow by about 20 per cent per annum to as much as \$ 9.0 billion (in constant prices) by the end of 1970s. In addition, there are several indirect costs of, and limitations on, the import and use of technology by developing countries.

In view of this, developing countries are endeavouring to improve their access to technology and their negotiating capabilities; to set up adequate institutions dealing with the transfer of technology on an integrated basis; to formulate appropriate national policies on the whole range of issues connected with the transfer in the light of national development planning; and to strengthen their national scientific and technological infrastructure as a counterpart to the transfer of technology.

A Colombo Plan study released in mid-1975 has also recommended that the transfer of technology should be stimulated to narrow the gap between the technological capabilities of the developed and developing countries. This would add to technological self-reliance and create faster rate of economic and social development in developing countries.

Table 19.18 indicates the net flow of financial resources received by developing countries in 1961, 1965, 1969 and 1971. DAC grants include grant-like contributions by Portugal (1.43), United Kingdom (0.41), Canada (0.37), Germany (0.34), Norway (0.33), United States (0.32), Japan (0.23), Italy (0.13), Switzerland (0.12) and Austria (0.06). These countries have been placed in descending order with respect to their net flow of official development assistance to developing countries and multilateral agencies as a percentage of their GNP in 1971. This percentage for 1971 is given in brackets after the name of each country. It would appear that the net flow of resources from DAC countries to the developing world fell substantially short of the one per cent target of GNP laid down by the United Nations and did not also meet the Pearson Commission target of giving 0.7 per cent of GNP as official development assistance (ODA). DAC countries cover USA, Canada, Japan and Western Europe.

TABLE 19.18

*Net flow of financial resources from DAC countries to developing countries and multilateral agencies in relation to gross national products.*

*(Amount in US \$ billions)*

		1957	1961	1965	1969	1971
i.	Total net flow, public and private	7.6	9.2	10.3	10.8	17.4
ii.	United Nations target (at 1% of GNP)	7.8	9.1	13.1	18.4	22.0
iii.	Total net flow as share of GNP (percentage)	0.97	0.89	0.77	0.75	0.79

iv.	Official development assistance (O.D.A.)	N.A.	5.7	5.9	6.6	7.7
v.	Pearson Commission target (ODA should be 0.7 per cent of GNP)	5.5	6.7	9.2	12.9	15.4
vi.	ODA as share of GNP (percentage)	N.A.	0.52	0.44	0.34	0.35

Source : OECD and World Bank.

Table 19.19 indicates the net flow of financial resources received by developing countries by source.

TABLE 19.19

		(US dollars millions)			
		1961	1965	1969	1971
i.	DAC grants	3,991	3,714	3,250	3,681
ii.	DAC bilateral official loans	1,401	2,132	2,909	3,760
iii.	Other bilateral	222	432	475	550
iv.	Multilateral	230	972	1,358	1,882
v.	DAC bilateral private	3,016	3,874	6,168	7,560
vi.	Total receipts	8,860	11,124	14,160	17,433
		(percent of total)			
vii.	DAC grants	45	33	23	21
viii.	DAC bilateral official loans	16	19	21	22
ix.	Other bilateral	2	4	4	3
x.	Multilateral	3	9	9	11
xi.	DAC bilateral private	34	35	44	43

Source: OECD.

"Other bilateral" covers rough estimates of flows from centrally planned economies whose contribution to the net flow of resources to developing countries remains at the figures of 3 per cent but it is 50 per cent higher in 1971 as compared to 1961. DAC grants show a short declining trend, while DAC bilateral private flows and net flows through multilateral agencies show a rising trend. DAC bilateral official loans also indicate a slightly rising trend.

During 1960-75, an era in which most of the Group of 77 countries gained their independence, non-military gifts to developing countries from the First World have totalled about \$57 billion, and concessional loans have comprised some \$84 billion. During the 1960s the U.S. contributed more than half of that assistance. Last year it gave 30 per cent of the \$11.3 billion in aid, \$14 billion in private investment and \$2.2 billion in the form of technical assistance that flowed from the First World to the LDCs.

As generous as this aid seems it falls short of the goal set by the UN Conference on Trade and Development (UNCTAD) and accepted by all First World states—as annual transfer of 0.7% of its G.N.P. to developing nations in the form of grants or low interest loans. In 1974 First World aid equalled only .33% of its combined G.N.P., down significantly from the .44% level of the mid-1960s; U.S. aid in 1974 was .23%. The Second World's Communist countries transferred 0.1% of its G.N.P. as assistance to non-communist LDCs in the past two decades: \$10 billion from the Soviet Union and \$5.5 billion from China.

#### EXTERNAL PUBLIC DEBT

The total external public debt of 80 developing countries increased from 37.4 billion dollars in 1965 to 66.7 billion dollars in 1970; the figures for debt servicing in these two years were

\$3.48 billion and \$5.9 billion respectively. 70.5 per cent of this debt was accounted for by 16 countries, listed below in order of the extent of their indebtedness in 1970:

India (\$9,235 million), Pakistan (\$4,302 million), Brazil, Mexico, Indonesia (\$3,462 million), Iran (3,021 million), South Korea, Turkey (\$2,626 million), Chile, Argentine, Israel (\$2,022 million), Yugoslavia, Columbia, Spain, Peru and Greece (\$1,004 million).

The increase in debt servicing liability of the developing countries along with the adverse movement in their terms of trade calls for a bold policy for accelerating the net flow of external assistance. Upto the end of 1973 loans to developing countries amounted to about \$120 billion and the cost of servicing them accounted for about half the assistance received by Third World countries. A large portion of these comprised the poorest countries. In principle it is desirable that until the objectives for which the specific development loans are provided are attained, a moratorium should be placed on their amortisation and interest payments. Table 19.20 indicates the net flow of official bilateral and multilateral resources and service payments on external debt of some Asian countries.

TABLE 19.20

*Net Flow of Official Assistance (A); and Service Payments on External Debt (B): X=Per Capita Debt Liability in 1973 in US Dollar*

X		1965		1969		1973	
		A	B	A	B	A	B
i)	Afghanistan	52.7	53.9	25.2	15.9	54.1	31.8
ii)	Bangladesh	11.4	—	—	—	427.7	9.8
iii)	India	21.6	1,286.7	842.5	502.5	688.1	635.9
iv)	Indonesia	52.5	42.8	331.0	56.6	655.4	210.9
v)	Pakistan	80.4	523.2	373.3	167.3	234.9	174.7
vi)	Sri Lanka	54.0	15.7	51.8	31.1	78.9	54.1

*Source: Asian Development Bank.*

The debt service ratio (that is, the service payments on external debt as a percentage of exports of goods and services) has been steadily growing as will appear from Table 19.21.

TABLE 19.21

*Debt-Service Ratio  
(Per cent)*

		1965	1969	1973
i.	Afghanistan	8.2	22.1	23.5
ii.	Bangladesh	—	—	2.5
iii.	India	13.3	22.7	21.5
iv.	Indonesia	10.3	5.6	7.0
v.	Pakistan	10.5	21.4	15.3
vi.	Sri Lanka	1.9	8.6	12.5

The year 1973 should not be taken as a representative year because this was the period of the international book in primary commodities.

Foreign aid in the context of net transfer of financial resources to the developing world should be considered as part and parcel of a wider package of cooperation between the "haves" and the "have nots" embracing other vital measures as well, such as the transfer of technology,

export promotion and the establishment of an equitable and fair relationship between the prices of primary products and manufactured goods.

The enlightened self-interest of the developed world calls for a massive injection of resources into the developing countries so that in time to come their imports from the developed world and their exports to it can maintain the affluence of their society. Such affluence can be enjoyed in peace and with a clear conscience when the huge existing pockets of poverty and despair are erased.

### Role of Foreign Aid in Pakistan

Pakistan has been receiving foreign economic assistance since the commencement of the Colombo Plan in 1950. The first grant assistance agreement was signed with the United States on February 2, 1951. The first loan agreement for \$ 27.2 million was signed with the International Bank for Reconstruction and Development on March 27, 1952, for financing the rehabilitation and development requirements of the railways. Since then, foreign aid has flowed in a steady stream to meet the development requirements of the economy. In the earlier years, economic assistance was provided on a grant basis by some of the friendly countries, in particular, Australia, Canada, New Zealand and the USA. Over the years, the proportion of grant assistance has been declining. The grant assistance agreements and the total loans and credits signed by Pakistan are indicated in Table 19.22.

TABLE 19.22

#### *Commitments of Foreign Aid to Pakistan*

	(A) Grant Assistance Agreements	(B) Total loans and credits contracted	Total of 'A' & 'B' as % of GNP
	Million US \$		
i. Pre-First Plan	213.35	334.562	1.1
ii. First Five-Year Plan (1955—60)	556.932	1,056.875	3.0
iii. Second Plan (1960—65)	1,556.372	3,624.405	7.0
iv. Third Plan (1965—70)	356.274	2,782.047	3.6
v. Fourth Plan (1970—75)	179.511	3,435.046	7.3

*Source:* Pakistan Economic Survey.

During the Second Plan period Pakistan enjoyed a good mix of grants and loans and their aggregate as a percentage of GNP was also satisfactory. In monetary terms foreign assistance extended to Pakistan during 1970—75 was only slightly less as compared to that obtained during the Second Plan period (1960—65), but in real terms it was less than half owing to inflation.

During the Second Plan period the Aid to Pakistan Consortium sources provided 92% of the total aid resources committed. Foreign aid excluding P.L.-480 (Public Law-480 of the U.S.A.) was only 1.1 per cent of GNP in the pre-First Plan period but it increased to about 7 per cent by 1964-65. Aid was effectively utilized for overcoming critical shortages, but at the same time it was not regarded as a substitute for domestic savings. There was a positive co-relationship between foreign aid inflows and the levels of savings and investment.

During 1960—65 the rate of domestic savings rose from less than 10 per cent to nearly 13 per cent of the GNP and the rate of marginal savings exceeded 20 per cent. In that period investment as a percentage of the GNP rose from less than 12% to nearly 20 per cent. Thus a higher rate of aid inflow made possible a higher growth rate by supporting higher domestic savings and investment.

Conversely, the reduction in foreign aid to Pakistan during 1965—70 dramatically cut savings and investment. As a proportion of the GNP, gross investment declined from 18.3% in 1964-65 to 14.3% in 1969-70, and if depreciation and replacement requirements are deducted, net investment ratios were more seriously affected. Nevertheless, the growth rate in GNP was sustained and averaged 5.8% during the Third Plan period, but this was only possible due to the normal throw-forward effect of cumulative investment during the Second Plan and the improvement in capital-output ratios. The reduction in the flow of foreign aid in real terms during 1970—75 combined with the adverse movement in the terms of trade (which in 1974-75 declined by 25% as compared to 1970-71, causing a loss roughly equal to 8% of GNP) led to a situation in which the developmental effort was financed by aid to the extent of over 80% in 1974-75; this was a far cry from the objectives of the Fourth Plan under which almost 80% of the developmental effort in 1974-75 was to be provided by the country itself. By 1969-70 investment and savings as a percentage of GNP fell to 14.3% and 10.7% respectively. In 1974-75 the inflow of increased external aid made it possible to increase investment to about 19% of GNP as against 13% in 1972-73; this is a movement towards regaining the level of investment required to attain sustained growth rates of around 6%.

The external debt of Pakistan as on June 30, 1975 is indicated in Table 19.23 and stands at \$4,696.397 million out of which \$440.0 million is from Islamic countries, \$218.195 million from non-Consortium countries, and \$4,038.202 million (about 86% of the total) from Consortium sources.

TABLE 19.23

*Outstanding External Indebtedness of Pakistan as on June 30, 1975*

(\$ Million)

Lending Country, Agency			Debt outstanding as on 30-6-75 Disbursed and outstanding
<b>A. CONSORTIUM INCLUDING OUTSIDE CONSORTIUM ARRANGEMENTS.</b>			
1. Belgium	..	..Capital Aid	23.428
	..	..Export Credit	
2. Canada	..	..CIDA Loans	199.040
	..	..EDC Credits	
	..	..Wheat Board Credit	
3. France	..	..Capital Aid	112.862
	..	..Export Credit	
4. Germany	..	..Capital Aid	458.299
	..	..Export Credit	
5. Italy	..	..Capital Aid	140.802
	..	..Export Credit	
6. Japan	..	..Capital Aid	253.104
	..	..Export Credit	
7. Netherlands	..	..Capital Aid	49.116
	..	..Export Credit	



8. Sweden	..	.. Capital Aid	}	5.485
	..	.. Export Credit		
9. U. K.	..	.. Capital Aid	}	271.672
	..	.. Export Credit		
	..	.. CDFC		
	..	.. ERC		
	..	.. Shell Petroleum Co.		
	..	.. Tenant Guaranty Ltd.		
	..	.. NGB Loans		
	..	.. Midland Bank Ltd.		
	..	.. Bankers Trust	}	1851.942
	..	.. International Ltd.		
10. U. S. A.	..	.. Capital Aid	}	1851.942
	..	.. Suppliers Credit		
	..	.. US-Eximbank		
	..	.. PL-480 Title-1 (CLCC)		
	..	.. CCC Credits		
	..	.. Singer Manufacturing Co.	}	47.033
11. Asian Development Bank				
12. IBRD	..	..		252.484
13. IDA	..	..		369.461
14. IFC	..	..		3.474
Sub-total (Consortium Sources):				4,038.202

Source: Economic Affairs Division.

*Outstanding External Indebtedness of Pakistan as on 30 June 1975 to Other Countries*

(\$ Million)

Lending Country/Agency			Debt outstanding as on 30-6-75 Disbursed and outstanding
<b>B. NON-CONSORTIUM SOURCES:</b>			
1. Austria	..	.. Export Credit	—
2. China	..	.. Loans	58.627
3. Bulgaria	..	..	0.500
4. Czechoslovakia	..	.. Export Credit	32.721
5. Denmark	..	.. Capital Aid	8.019
	..	.. Suppliers Credit	
6. Kuwait	..	.. Suppliers Credit	0.536
7. Poland	..	.. Export Credit	3.209
8. Romania	..	..	5.545
9. Switzerland	..	.. Export Credit	30.220
10. Turkey	..	.. Export Credit	0.729
11. USSR	..	.. State Credit	62.031
	..	.. Export Credit	
12. Yugoslavia	..	..	16.058

Sub-total (Non-Consortium Sources):	218.195
Total (A+B Sources):	4,256.397

#### ISLAMIC COUNTRIES

1. Iran	250.000
2. Abu Dhabi	100.000
3. Qatar	10.000
4. Libya	80.000
Total:	440.000
Grand Total:	4,696.397

*Source:* Economic Affairs Division.

The terms of foreign economic assistance to Pakistan in mid-1975 are indicated in Table 19.24. It would appear that the terms are indeed concessionary as compared to the prevailing market rate.

**TABLE 19.24**

*Terms of Foreign Economic Assistance (As on 30-6-1975)*

Country	Rate of Interest %	Amortization years
Belgium		
Capital	2	30
Export Credit	8.85	10
Canada CIDA	0	30
France		
State Credit	3	18
Banker's Credit	7.8	10
Germany		
Capital Aid	2-2.5	30
Italy		
Export Credit	6	10
Japan		
Capital Aid	4	25
Netherland		
Capital Aid	2.5	30
U.K. Capital Aid	0	25
U. S. A.	2.3	40
IBRD	8.5	20
IDA	8.5 (Commitment Charges)	50
ADB	a) 8.5% for ordinary b) 1% for special operation	25 40

<b>Non-Consortium</b>		
Austria	5	10
Bulgaria	2.5	12
China	0	40
Czechoslovakia	2.5	10
Denmark	0	35
Germany (DR)	7.5	8
Poland	2.5	10
Switzerland	6.75	10
Romania	3.5	10
USSR	2.5	10-12
Yugoslavia	3	10
<b>Islamic Countries</b>		
Iran	2.5	8
Abu Dhabi	2.5	40
Saudi Arabia	0.0	15
Qatar	3	10
Libya	1	35

Source: Economic Affairs Division.

There is a fairly wide array of countries and agencies which have provided foreign aid to Pakistan.

Upto mid-1975 Pakistan had signed agreements for grant assistance totalling \$ 2,872.424 million as in Table 19.25.

TABLE 19.25

*Grant Assistance Agreements signed by Pakistan upto mid-1975*

Name of lending Country/Agency		Amount (Million US dollars)
<b>I. Consortium including outside Consortium sources:</b>		
1. Canada	..	249.102
2. Germany	..	0.663
3. Japan	..	1.269
4. Netherlands	..	0.742
5. New Zealand	..	6.428
6. Norway	..	15.636
7. Sweden	..	26.726
8. Switzerland	..	0.244
9. U. K.	..	14.435
10. U.S.A.	..	1357.212
11. UN and specialized agencies	..	21.417
12. UNDP Special Fund	..	30.770
13. Ford Foundation	..	37.925
14. FAC/Others	..	50.925
15. E. E. C. Special	..	3000
Sub-total (Consortium)		1816.494

## II. Non-Consortium Sources:

1) Australia	..	29.326
2) China	..	106.363
Sub-total (Non-consortium)		135.689
Sub-total (I and II)		1952.183

## III. Indus-Tarbela Development Fund:

1. Australia	..	26.916
2. Canada	..	37.003
3. Germany	..	58.336
4. India	..	168.803
5. New Zealand	..	3.902
6. U. K.	..	91.691
7. U.S. (a) Dollars	..	295.590
(b) Rupee contribution	..	235.000
Sub-total (III)		920.241
Sub-total (General I, II & III)		2872.424

Source: Economic Affairs Division.

The total loans and credits contracted by Pakistan upto mid-1975 totalled \$ 8,391.511 million as in Table 19.26.

TABLE 19.26

*Total Loans and Credits contracted by Pakistan upto mid-1975*

Name of the lending Country/Agency		Amount (Million US \$)
<b>A. Consortium Sources:</b>		
1. Belgium	..	29.459
2. Canada	..	291.847
3. France	..	227.551
4. Germany	..	579.441
5. Italy	..	186.757
6. Japan	..	388.694
7. Netherlands	..	62.270
8. Sweden	..	5.117
9. U. K.	..	519.651
10. U.S. (a) Repayable in dollars	..	2,240.572
(b) Repayable in local currency	..	732.614
Sub-total (USA)		2,973.186
11. IBRD	..	659.458

12. IDA	580.410
13. IFC	13.933

Sub-total (Consortium sources)	6,517.774
--------------------------------	-----------

#### B. Non-Consortium

1. ADB	219.308
2. Australia	5.454
3. Bulgaria	3.880
4. China	217.391
5. Czechoslovakia	52.513
6. Denmark	19.363
7. German Democratic Republic	3.500
8. Kuwait	4.958
9. Poland	5.537
10. Romania	15.868
11. Switzerland	35.003
12. Turkey	3.099
13. USSR	509.017
14. Yugoslavia	50.986
15. Suppliers Credits from various sources	71.750

Sub-total (Non-consortium)	1,217.627
----------------------------	-----------

#### C. Non-Traditional:

Iran	366.110
Abu Dhabi	100.000
Saudi Arabia	100.000
Qatar	10.000
Libya	80.000

Sub-total (Non-traditional)	656.110
-----------------------------	---------

Total loans (A, B, C)	8,391.511
-----------------------	-----------

Total loans + grants	11,263.935
----------------------	------------

The total of grants and loans committed to Pakistan upto mid-1975 amounted to \$11,263.935 million; quite an impressive record for a country which 28 years ago did not even have an economic and social infrastructure worth the name. The country has exhibited a viable absorption capacity which speaks well of its economic administration over the years.

External indebtedness of a country generally refers to the aid disbursed and outstanding on a particular date. In addition there is what is called the pipeline of aid. This covers aid which is committed but not yet disbursed, and becomes useful in meeting emergency situations such as a sharp drop in the commitment level of fresh aid or a sudden decline in export earnings. Disbursements against aid in the pipeline are taken into account when asking for fresh commitments.

### PAKISTAN'S REQUIREMENTS

Pakistan's requirements of foreign aid are estimated at \$ 1400 million during 1975-76 as against a projected gap of \$ 1750 million (\$ 1472 million on current account and \$277 million on capital account). Pakistan expects to meet the other \$ 350 million by its own efforts to the extent of \$ 200 million, through the IMF oil facility (\$ 100 million) and inflow of private investment (\$ 50 million mainly from OPEC countries).

The projected gap of \$ 1750 million includes \$ 277 million for amortisation of debt and repayment of short-term food credit. This amounts to about 20 per cent of the estimated merchandise exports of \$ 1350 million during 1975-76. During 1975-76, repayments of principal on debt and food credits are anticipated to increase by \$ 146 million. Of this, \$ 95 million represents the repayment of Australian food credit and short-term borrowing for wheat imports during 1974-75. Repayment of principal on long-term debt will increase by the balance of \$ 51 million.

As against the requirement of \$ 1400 million, the disbursements from the pipeline of aid already committed are estimated at \$ 715 million as under:

*Aid Disbursement against Pipeline*

(\$ Million)

	Non-Consortium			Total
	Consortium	Traditional	Non-Traditional	
1. Project Assistance	248	127	40	415
2. Commodity Assistance and Balance of Payments support	110	10	180	300
	358	137	220	715

The estimates of disbursements against fresh commitments are estimated at \$ 685 million as under:

*Disbursements in 1975-76 against Fresh Aid Commitments*

(\$ Million)

	Non-Consortium			Total
	Consortium	Traditional	Non-Traditional	
Project Assistance	27	23	17	67
Commodity Aid and balance of payments support	180	5	255	440
Food Aid	150	28	—	178
	357	56	272	685

The total disbursement of \$ 1400 million during 1975-76 is expected to have the following composition:

*Total Aid Disbursement*

(\$ Million)

	Project	Food	Other	Total
1) Consortium aid	275	150	290	715
2) Non-Consortium Aid:	150	28	15	193
Traditional/Non-Traditional	57		435	492

Total:	482	178	740	1400
--------	-----	-----	-----	------

It would be observed that disbursements from Consortium aid would approximate \$ 715 million during 1975-76 out of which \$ 358 million would be from pipeline aid. In order to provide for the remaining \$ 357 million, Pakistan requested from the Consortium for a fresh commitment of \$ 600 million in addition to food aid. This would leave some \$ 243 million of Consortium assistance in the pipeline at the end of 1975-76.

In Pakistan foreign aid is coordinated by the Economic Affairs Division and this Ministry has been fortunate to have enjoyed a succession of able and dedicated Secretaries right from the late Said Hasan in the early fifties to his son-in-law, Aftab Ahmed Khan, in the mid-seventies. Effective coordination among multilateral and bilateral donors of assistance and between donors and recipient countries is an important element in the development effort. It can help to assure that donors are supporting consistent development goals and that financial and technical aid from different sources is applied efficiently to priority requirements. It can also facilitate better planning and execution by the developing countries and so enable them to use assistance more productively.

### Trade and Aid Policies

Trade policy refers to those measures taken by Government which directly affect trade in merchandise; sometimes the scope of this definition is enlarged to include services. The main instruments of trade policy are import and export, duties, quantitative trade restrictions, export promotion measures, state trading, bilateral trade agreements, and other techniques of direct and indirect controls.

Foreign aid policy covers all the activities involved in the field of official development assistance (loans and grants) that are intended to assist in the economic and social development, reconstruction or defence of the recipient country. Foreign aid poses several problems for the donor as well as the recipient country. The donor must decide such matters as the amount of aid to be given, to whom it is to be given, and how it is to be controlled. The recipient countries have to decide whether to accept the aid and the extent to which they should allow the donor country to influence its use. Since the "good Samaritan" gesture is only a fraction of the aid motivation on the part of the donor country, the recipient country must carefully evaluate the price it may be required to pay for such aid and whether or not it is worth paying that price.

Broadly speaking, international economic policy deals with the entire range of the economic activities of a government that affects the composition, direction and quantum of international trade and finance. Since internal economic policies, such as monetary, fiscal, industrial, agricultural and social welfare policies, have a marked impact on trade, there is complete mutual interdependence between internal and external economic policies.

This was vividly stated in a United States Congress report in the mid-fifties: "Our foreign economic policy is broadly conceived to include not only specific government measures in such fields as tariffs and foreign economic aid, but also all American economic behaviour, public and private, foreign and domestic, which has its repercussions on the rest of the world."

The fundamental objectives of international economic policy can be identified as the achievement of national self-sufficiency, securing economic welfare by using international trade to secure international specialisation; protection of domestic producers against competition from imports; sustaining the economy at full employment levels; securing of equilibrium in balance of payments; accelerating economic growth; and successfully waging economic warfare by using growth; and successfully waging economic warfare by using foreign trade and aid to further political and military designs and to limit the advantages of those in the opposite camp.

The means of achieving all these objectives are limited so far as any one nation is concerned; and, even if the means were available, there is a significant conflict of ends. A greater part of international economic policy is designed to smoothen out the internal and external conflicts

in these fundamental objectives. Compromise and understanding are characteristics of the efforts to alleviate this conflict of ends.

## FOREIGN POLICY

Foreign policy deals with the entire gamut of international relations—political, economic and cultural. The foreign policy of a country is primarily determined by considerations of enlightened self-interest. National interests are more important than any other consideration. Of course, the foreign policy of a country has to have a moral bias and should be in general accord with the ideology and way of life of its people.

The close inter-relationship between foreign, economic trade and aid policies is clear. The coordination of these policies is absolutely necessary to attain the agreed objectives. It is inconceivable that foreign policy and trade and aid policy pursue opposite paths. Aid and trade policies are value handmaids of economic policy and the two have to be dovetailed in order to secure a viable economy. The greater part of foreign policy in modern times is directed to the solution of complex and pressing economic problems. The establishment of a New Economic Order is no longer a purely economic problem; it is the world's number one political issue.

Pakistan's foreign policy under Prime Minister Bhutto is based on the principle of bilateralism which implies the cultivation of good bilateral relations with all countries of the world on the basis of sovereign equality. In concrete terms the goals of the new foreign policy can be summed up as under:

- i) to restore confidence of friendly countries in the future of Pakistan;
- ii) to restore and maintain friendly relations with all countries of the world on a bilateral basis, particularly with the Big Powers;
- iii) to seek an honourable peace with India;
- iv) to arrive at a settlement with Bangladesh;
- v) to project Pakistan's image abroad; and
- vi) to promote foreign economic assistance to Pakistan.

The Government has given top priority to strengthening bilateral links with the Muslim countries. Agreements with Libya, the United Arab Emirates and Saudi Arabia have been signed for the establishment of joint ministerial commissions which would supervise and periodically review the expanding collaboration in the political, economic and technical spheres with these countries.

Iran, Pakistan and Turkey are partners in CENTO and RCD and have also had the friendliest of relations.

Pakistan's friendship with Iran is one of the invariables of its foreign policy. It is based on a deep perception of the common vision of the complementary nature of their objectives in the foreseeable future. The Prime Minister visited Iran twice during 1974. His meeting with the Shahinshah at Iish island was highly successful. Substantial Iranian financial assistance was pledged to Pakistan. The joint communique unequivocally reaffirmed the special relationship between the two countries. In addition to the Prime Minister's visit there have been several high level exchanges between parliamentarians and officials of the Governments. Iran has also given to Pakistan a loan of 580 million dollars on 2.5 per cent interest. The repayment period is five years with a three-year grace period. Pakistan should also be receiving assistance from the OPEC fund of 800 million dollars set up on the initiative of the Shahinshah.

Talks between India and Pakistan on the restoration of postal and telecommunication links and travel facilities were held in September, 1974 and led to the conclusion of agreement on these subjects. Trade talks were held in Delhi at the end of November, 1974, and a protocol was signed lifting the ban on trade imposed after the war of 1965. A trade agreement was concluded with India in January, 1975 and a cotton sale deal worth 30 million dollars under the agreement was arrived at in February, 1975.

The Prime Minister visited Dacca in June, 1974, and was accorded an affectionate and spontaneous welcome which augured well for future relations between the two countries. In the official talks the Bangladesh Government demanded an immediate transfer of 56 per cent of the gold and foreign exchange reserves of the State Bank of Pakistan and other Pakistani assets without going into the whole question of the apportionment of assets and liabilities. As a gesture of



conciliation, the Prime Minister offered to set up a joint committee to examine the overall question of assets and liabilities which would be asked to report within a time-limit of three months. This was turned down by the Bangladesh authorities.

Following the assassination of Shaikh Mujibur Rahman on August 15, 1975, and three successive coups from November 3 to 7, the new Government which emerged took steps to restore harmonious relations with Pakistan. Ambassadors have been exchanged. Telecommunications, postal links and trade between the two countries are likely to be resumed in the near future.

Pakistan's relations with Sri Lanka have been uniformly friendly. They acquired new dimensions in 1971 when Sri Lanka despite foreign pressures, allowed bilateral transit and refuelling facilities to Pakistani planes flying between West and East Pakistan. In the post-1971 period, trade between Sri Lanka and Pakistan has registered a tremendous increase. Pakistan now imports tea and betel leaves from Sri Lanka and in turn exports rice, textiles and some manufactured goods.

### RELATIONS WITH MAJOR POWERS

Pakistan's relations with the major powers are founded on the principles of bilateralism which aim at maintaining good relations with all of them without getting involved in their mutual disputes. With that end in view, Pakistan has sought to develop friendly relations and constructive cooperation with the People's Republic of China, the USSR, and the United States of America. Pakistan has always enjoyed the best of relations with China.

The increase in Soviet credits for the construction of the steel mill at Karachi and cooperation in the exploitation of oil and gas reflects the new levels of economic cooperation between Pakistan and the USSR.

Pakistan's relations with the United States have always been friendly. Pakistan is linked with the United States by a number of treaties and Washington has played a decisive role in promoting its development goals. There is at present complete understanding based on an overall identity of views on the problems pertaining to South Asia. As a result of the Prime Minister's visits to the United States in September, 1973, and February 1975, relations between the two countries have been further strengthened. Both President Nixon and President Ford affirmed strong support for Pakistan's independence and territorial integrity and endorsed it as a guiding principle of American foreign policy. The USA promised further food grant assistance and the Prime Minister's extensive discussions resulted in the lifting of the U.S. arms embargo imposed against Pakistan since the 1965 war with India.

The cooperation between Pakistan and Indonesia has been institutionalized through the Organization of the Indonesia-Pakistan Economic and Cultural Cooperation.

Pakistan's relations with Australia are cordial and friendly, Australia has given valuable economic assistance and food aid to Pakistan.

The distinctive feature of the Australian aid is that it is entirely in the form of grants and not repayable loans.

Pakistan's relations with the West European countries have generally been close and cordial. Most of these countries participate in the Aid-to-Pakistan Consortium. The Federal Republic of Germany and France give substantial aid and the former is the second largest contributors to the Consortium aid.

Pakistan's relations with Great Britain have registered a notable improvement in the past two years during which the problem of Pakistan immigrants to the United Kingdom has been satisfactorily resolved.

The Prime Minister has also paid visits to the Netherlands, Austria and Switzerland and sent special envoys to some of the other West European countries. As a result of these efforts, Pakistan has been able to rehabilitate its image and resume economic cooperation with these countries.

Although Pakistan was hit hard by the increase in the price of oil, it supported the oil-producing countries' just demand against the industrialised West. In the special session of the General Assembly, Pakistan played a constructive role in promoting a solution to the economic

difficulties facing the world, particularly the poorer nations of Asia, Africa and Latin America. At the Dakar Conference of developing countries on raw materials, Pakistan proposed a specific strategy to overcome the economic difficulties of the Third World. The conference, in recognition of its role, selected Pakistan to represent it at the OPEC conference at Algiers.

Notwithstanding the resource constraint, Pakistan has launched a modest technical assistance programme, to help the Third World countries in their development efforts. Under this programme scholarships and training facilities have been provided in various fields to individuals from countries of the Third World.

It would thus appear that Pakistan's foreign policy while based on sound political principles also gives a forward thrust to its economic policy. Prime Minister Bhutto may exude the image of a restless romantic, impatient of bureaucracy and burgeoning with a sense of destiny, but his feet are firmly on the ground when it comes to coordinating foreign and economic policies.

# Public Finance

## Scope and importance

Dr. Hugh Dalton, one of the founding fathers of Fabianism, a distinguished Professor at the London School of Economics and a pragmatic Chancellor of the Exchequer in a Labour Government, has very aptly remarked that Public Finance is one of those subjects which lie on the border line between Economics and Politics. In fact Public Finance represents a continuous conflict between that which is politically desirable and that which is economically feasible. Public Finance is primarily concerned with the raising of money incomes by public authorities and its expenditure by them. This does not imply that the public authority is limited to monetary transactions; conscription to the Armed Forces and the services of voluntary agencies during times of emergency are illustrations of the demonetised public sector but these are of no special significance particularly in under-developed countries.

The concept of public authority covers all governmental institutions including central and provincial governments as well as municipalities and other local governments. The science of public finance in modern times includes four major branches: public revenues, public expenditure, national debt, and fiscal policy. Matters such as those relating to the budget and budgetary control and deficit financing are usually considered under fiscal policy.

The history of the development of Public Finance is really speaking co-terminus with that of human freedom and dignity. Disruption of the Jewish Monarchy followed the refusal of King Rehoboam to reduce the heavy taxes imposed by King Solomon for financing an ambitious public works programme. King Rehoboam's threat, expressed in the following authoritarian language, led to the stoning to death of his revenue agents and to a successful insurgency.

"My little finger shall be thicker than my father's loins. And now whereas my father did lade you with a heavy yoke, I will add to your yoke; my father hath chastised you with whips, but I will chastise you with scorpions."

Islam enjoins a strictly egalitarian system of Public Finance. The virtues of Social Welfare expenditure are extolled with great vigour. It is laid down that taxation must not be arbitrary and that it should ensure justice between man and man. Wasteful expenditure is condemned and productive expenditure and increased production and trade are commended.

The constitutional development of the United Kingdom was intimately related to the role of taxation and public expenditure which, in turn, used to be based on the personal whims of the ruler, mostly for his personal comfort and greater glory. The control of expenditure and taxation by Parliament has been the most effective method of securing popular control over government and it has been proved to be a valuable expedient for restraining the undue influence of the Head of State or Government.

The celebrated Magna Carta, signed in 1215, among other things, declared that "no scutage for land shall be imposed in the kingdom unless by the Common Counsel of the realm, except for the purpose of ransoming the king's person, making his first-born son a knight, and marrying his eldest daughter once; and the aids for these purposes shall be reasonable in amount." (Scutage was primarily a tax paid in lieu of military service.)

Charles I was beheaded after a revolt which was partly occasioned by his demanding ship money (an old tradition under which each port was required to provide the monarch with a ship) in cash instead of in kind and taking on credit a cargo of pepper brought in by the East India Company and selling it cheaply for cash.

The American Revolution in the latter part of the 18th century was inspired by the slogan "no taxation without representation" and the American Colonies successfully defied the authority of the Mother Country to levy taxes through a parliament in which they were not represented. The United States of America, which is now the most powerful country in the world, both in

economic and military terms, evolved the roots of its nationhood through matters related to public finance.

Although the French Revolution inspired the world with its Clarion Call for "Liberty, Equality and Fraternity", the real roots of the revolution lay in the oppressive tax system which was imposed to finance the luxuries of a debauched Court. The "taille" was a tax imposed on the profits of a fair, but the nobles, clergy and the wealthy bourgeois were exempted. This tax, apart from its arbitrary method of assessment and callous method of collection, was supposed to dishonour whoever was subject to it. Peasants were mortally afraid of exhibiting even the meagrest measure of comfort for fear of attracting an unscrupulous and illiterate tax-man. Besides this, France was cursed with an elaborate system of tariffs, which were collected not merely at the frontier of the country but also at the administrative borders of the provinces and the cities. Even a brilliant finance minister like Turgot could not persuade Louis XVI to reduce his extravagance and permit a reform of the tax structure.

In Pakistan the 1973 Constitution has indicated that federal and provincial revenues and expenditure should be under the control of the respective legislatures, although some exemptions have been made. In the case of public expenditure relating to the President, Governor, Judges of the superior courts, Auditor General, legislatures, national debt, court awards, and any sums so declared by the constitution or the legislature concerned, the concerned legislature can discuss these charges but cannot vote on them. With regard to taxation it is provided that no tax shall be levied except by or under the authority of an Act of the legislature.

It does happen, though, that government secures the authority of Parliament to vary the rates of taxation through an executive order, even after the approval of the budgetary proposals. The practice has been criticised on the ground that this enables the executive to levy taxes without a public parliamentary debate in which the issues involved can be thrashed out. As far as the public debt is concerned the representatives of the people can debate on it but the ultimate decision rests with the executive. Article 7 of the 1973 Constitution defines the State to mean the Federal Government, Parliament, a Provincial Government, a Provincial Assembly and such local or other authorities as are by law empowered to impose any tax or cess.

Public finance and private finance are supposed to have an inherent difference inasmuch as private expenditure has to be adjusted to income, while public income has to be adjusted to public expenditure. This distinction is more apparent than real because both the public and private sectors resort to borrowing when current revenues are not sufficient to meet what they consider are their legitimate requirements. In both cases the extent of the borrowing should depend on the ability to service the debt.

### THREE BASIC DIFFERENCES

There are, however, three basic differences between public finance and private or business finance. In the case of the latter the priority of expenditure is determined exclusively in terms of its capacity to produce revenue for the individual or the business, while public authorities, on the other hand, spend to promote general welfare even when no direct revenue is anticipated. Even when public expenditure is designed to promote economic activity and to support the economy, the addition to national income which is so generated does not come into the government coffers unless the government chooses to take a part of it away from individuals.

The public sector also finances activity (such as education and health) on which the financial return is long delayed. There is thus a marked difference between the motives of public finance which should emphasise the general good and those of private finance which stress the profit motive.

The second major point of difference between public and private finance is the degree of coerciveness and Benjamin Franklin has truly asserted that the only human certainties are death and taxes. For every right there is a corresponding obligation and the possession of coercive power by government should imbue it with a much greater sense of responsibility in the formulation of fiscal policy.

The third and last major point of difference between public finance and private finance is that while the latter studies the activities of the State which are directed towards the satisfaction

of collective wants, the former deals with the activities of the individual which are directed towards the satisfaction of individual wants. Here, too, the assumptions are that public goods should be produced at the least cost in order to reduce the tax burden, and that people will try to maximise the consumption of public goods while attempting to pay as little as they can for their consumption.

In the words of the Italian economist, Antonio de Viti de Marco, the science of Public Finance "investigates the conditions to which the productive activity of the State must be subjected in order that the choice of the public services which are to be produced, the determination of their respective amounts, the distribution of the cost among consumers, etc., may take place according to the principles of the theory of value—that is, with the least possible waste of private wealth, in order to gain the greatest satisfaction of collective needs." He has gone on to elaborate the distinction between individual and collective wants. Individual or general wants "are homogenous for all the individuals who make up the social group; that is they are the arithmetic sum of individual wants.... Collective wants, on the other hand, precisely because they arise from a conflict of interests, are not homogenous for all" and they are represented by an algebraic sum of positive and negative quantities depending on the estimates of its utility or disutility by various people. Antonio de Viti de Marco concludes that in Public Finance the collective demand is the result of the conflicting evaluations of various groups and individuals, and that the State, if it furnishes headgear to its soldiers, must provide as many hats as there are soldiers, including those who do not want them.

Public Finance is a critical component and an integral part of any State, big or small, modern or medieval. The activities associated with Public Finance are dependent on the role which people assign to the State. At one extreme are those who advocate that the functions of government should be confined to the maintenance of internal law and order and security against external aggression. At the other extreme are the power factions of the socialist and communist countries that make the State all powerful and concentrate political, economic and social authority in single monolithic party organisation which regulates every facet of human behaviour within its national borders.

While the maintenance of law and order and adequate defence continues to be the primary function of the State, there is a general consensus that the State should not be regarded merely as an end in itself. The position when Economics used to be the handmaid of Politics has now been reversed into one in which Politics is the handmaid of Economics. State intervention in economic sector is now an established principle, but the extent of State intervention varies from time to time and from country to country. We are still a long way from the position when the State will wither away and society will regulate itself. The State now plays an ever-increasing role in providing the economic and social infrastructure of society which covers the following sectors: water, power, transport and communications (roads, railways, ports, airports, post, telegraph and telecommunications), health, education and social welfare.

## FUNCTIONAL FINANCE

Larner's concept of "functional finance" is now an accepted principle. Functional finance implies that the revenues and expenditures of the State should not be occasioned solely by the requirement of securing collective consumption. The finances of government should be conducted on a "functional" basis and expenditures and revenues should be used as important tools of fiscal policy. Adequate consideration should be given to their effects on employment, economic growth and effective demand. Expenditures should not be considered only in relation to their direct benefits nor should taxation be looked upon merely as an instrument for raising revenue. This aspect of Public Finance will be dealt with in greater detail in the section dealing with "Fiscal Policy."

The functions of the modern state can be summarised as follows and they are the ones which are closely inter-related with Public Finance:

- (i) Maintenance of internal law and order and defence of the sovereignty and national integrity of the country. This is the primary function of the state.
- (ii) Civil administration: This is also a necessity and covers the host of officials and

agencies which plan, implement and progress the affairs of the state in the political, economic and social fields.

- (iii) Provision of economic infrastructure: This covers water, power, transport and communication.
- (iv) Provision of social infrastructure: This sector is now growing more rapidly than one could envisage some time ago and includes education, health, housing, sanitation, parks, museums, libraries, and social insurance programmes related to unemployment, old age, sickness, maternity and accidents.
- (v) Participation in trade and industry: This can be done either on ideological grounds or for pragmatic considerations or for both reasons. Generally, State participation or intervention is suggested when the business is of a monopolistic nature, or where private enterprise would not be attracted, or in the case of public utility services. The activities of the state in this direction do not merely imply ownership of the means of production and distribution; they also cover to an increasing degree the facilities and incentives provided to trade and industry, as also its regulation and control.
- (vi) Optimum utilisation of national resources: This is basically a planning function. Apart from maximising welfare and production, this aspect should also deal with environmental matters and conservation of natural resources for future generations.
- (vii) Agency for accelerated economic growth and maintenance of economic stability: This function overlaps substantially the previous function relating to the optimum utilisation of national resources. It has been stated separately so as to emphasise the role of the State in taking anti-cyclical and anti-inflationary measures and directly and indirectly accelerating the rate of economic growth. The direction which economic growth should take could be more appropriately considered under optimum utilisation of national resources.

## PRE-EMPTION OF GNP

Since the thirties and particularly since World War II government all over the world have pre-empted an increasingly greater share of the gross national product. Of course the percentage of GNP so pre-empted by the State was very high in the case of centrally planned economics, but even in the industrialised countries of the West governmental activity utilises anything from 25 to 40 per cent of the G.N.P. In under-developed countries the State is acquiring an ever larger share of the GNP although the restricted tax base and terribly low per capita income does mean that the burden of the national revenue falls heavily on all shoulders—rich, middle class or poor.

Table 20.1 illustrates the relationship in Pakistan between the revenues of the Central and Provincial Governments and the gross national product at current factor cost over the last 25 years. Between 1950-51 and 1973-74 central and provincial revenues as a percentage of GNP have consistently increased from 7.87 per cent to 17.89 per cent. During 1974-75 they fell to 15.86 but this was on account of a combination of inflation and stagnation in production and economic activity.

TABLE 20.1

### *Central and Provincial Revenues and GNP at Current Factor Cost*

Year	Central Revenue Receipts (Million Rupees)	*Provincial Revenue Receipts (Million Rupees)	GNP at Current Factor Cost (Million Rupees)	Central and Provincial Revenues as percentage of GNP at Current Factor Cost
1950-51	1,273.2	359.8	20,759	7.87

1954-55	1,172.7	472.2	21,151	7.79
1958-59	1,958.7	880.9	28,042	10.13
1964-65	3,301	1,819.1	45,525	11.24
1969-70	6,726.2	2,184.8	74,961	11.88
1972-73	7,532.9	2,534.6	60,355	15.1
1973-74	10,618	3,512.1	78,986	17.89
1974-75	12,092	3,627.3	99,120	15.86

\* Does not include figures for former East Pakistan.

Source : Central Statistical Office and Economic Surveys.

The saying "Money makes the mare go" is as true of Public Finance as it is for private finance. The strength and viability of a nation is reflected in its budget and the nature, extent and effectiveness of state activity is, by and large, determined by the availability of resources. Public Finance is no longer restricted to the art of plucking the feathers of the goose as to cause the least amount of honking, although this factor still remains a powerful deterrent to the insatiable avarice of officials administering Public Finance. In the modern State, Public Finance is being increasingly used for economic and social objectives, apart from catering to the fundamental requirements of a civilised society.

### MAXIMUM SOCIAL ADVANTAGE

The fundamental principle of Public Finance is, what my old mentor, Dalton, calls the Principle of Maximum Social Advantage:

"All operations of public finance resolve themselves into a series of transfers of purchasing power, and of consequential changes in the use of economic resources. These transfers are made, by taxation or otherwise, from certain individuals to public authorities, and back again from these authorities, by way of public expenditure, to other individuals, some of whom, such as policemen or contractors, render services in return, while others, such as old age pensioners, do not. . . . Variations in total purchasing power are made either through the budget, or through the banks, or both. . . . As a result of all these operations of public finance, changes take place in the amount and in the nature of the wealth which is produced, and in the distribution of that wealth among individuals and classes. . . . The best system of finance is that which secures the maximum social advantage from the operations which it conducts."

Improvements in production consist of increase in productivity (larger product per worker with a smaller effort), improvement in the organisation of production (avoidance of waste of economic resources, including those caused by unemployment or under-employment), and bettering the pattern of production so as to best serve the needs of society. On the other hand, improvements in distribution consist of a reduction in the inequality of opportunity, income and wealth, and a reduction in the large fluctuations in incomes associated with depressions and booms.

It is the bounden duty of officials administering Public Finance to examine the effects of a fiscal proposal on national production, national income, national standard of living, distribution of wealth and income, financial markets, particular localities, specific lines of business, specific economic classes, rights of citizens, structure and form of government, and international relations. They should also consider whether the necessary personnel and material are available and, above all, whether the job can be done efficiently. Whether or not the adoption of the proposal is possible it should be left to the politician because they have politics in their blood and are astute practitioners of the art of the possible. It should also be stressed that it is not possible to pass a reliable judgement on any particular aspect of public finance without balancing it against the other side of the operation.

The effects of the raising of revenue have to be balanced against the efforts of the spending of revenue. The burden of taxation should invariably be related to the benefits of public expenditure. Neither is all taxation evil nor is all public expenditure unproductive. A sharp distinction should, however, be drawn between false and true economy. Expenditure need not be limited but it

must be made wisely. In the words of Burke: "Mere parsimony is not economy. Expense and great expense may be an essential part in true economy. Economy is a distributive virtue and consists not in saving but in selection."

## Public Revenue

**Source of Revenue:** The revenue of public authorities is mostly derived from taxes. In centrally planned economies the revenue receipts from publicly-owned undertakings may well be in excess of taxes. Even in the industrialized countries of the West and in the developing countries where the philosophy of socialism is not practised, the contribution of publicly-owned enterprises to public revenues can be quite substantial. Public utilities, such as transport and communications, power and water supply, contribute largely to revenues of the State. Taxation, however continues to be the main source of public revenue. In this connection attention will be focussed on various matters related to taxation and the economics of publicly-owned enterprises will be dealt with in the Chapters on Industry, Transport and Communications, and Power and Natural Resources.

In the words of Taussig, "The essence of a tax, as distinguished from other charges by government, is the absence of any direct *quid pro quo* between the tax-payer and public authority."

Governments also collect revenue through imposition of fees, special assessments, rates and prices. A fee like a tax is a compulsory payment, the only difference being that in the case of a fee the person who pays the fee obtains a definite service in return. The fee is intended to cover a part of the service rendered.

Special assessment is defined by Professor Seligman as "a compulsory contribution levied in proportion to the special benefit derived to defray the cost of the specific improvement to property undertaken in the public interest." If the government builds a road or makes suitable drainage arrangements, all the property in the neighbourhood will improve in value. The State has a right to appropriate a part of this unearned increment. The tax imposed for this purpose is called a special assessment. These assessments are intended to cover a part of the expenditure incurred by the public authority in this connection. They are levied on property in proportion to the benefit conferred.

Rates are levied by local bodies, such as municipalities, for local purposes. They are generally levied on immovable properties but they are not necessarily related to the conferment of any special benefit. Rates generally vary from locality to locality.

Prices are also paid for specific services rendered by the State. But the difference between a fee and a price is that, in the case of a fee, the public interest is predominant whereas a price is the payment for a service of a business character, as for example, charges for travelling on state railways. One can escape the price by not purchasing the service. Prices also differ from a tax inasmuch as a tax is paid for a common benefit, whereas both fees and prices are paid for specific benefits. When a public authority sells a commodity or renders a service, the charges made on the consumer, who avails of the service or buys a commodity is called a price.

The printing of paper money by the government may not be quite the same thing as the imposition of a tax, yet by reducing the value of money it has an effect similar to that of a general tax upon all commodities and services.

The line of demarcation between various kinds of public revenue is by no means sharp. The monopoly profits of a public enterprise are much like a tax as there is no distinction between the Pakistan Government's monopoly profits from the sale of cement and its revenue or from tobacco duties imposed on private traders. The difference between penalties and taxes is one of motive, as the public authority imposes a tax to obtain revenue and imposes penalties to deter people from certain acts. The receipts from public enterprises and receipts from passively held public property are essentially the same as in both revenues some form of supervision is required. The latter case constitutes an enterprise as much as the delivery of letters and telegrams.



## Principles of taxation

The principles of taxation or the canons of taxation were so clearly defined by Adam Smith that they still constitute the basic principles of taxation. His four celebrated canons are:

- i) **Canon of Equality:** "The subjects of every State ought to contribute towards the support of the government, as nearly as possible, in principle to their respective abilities, that is, in principle to the revenue which they respectively enjoy under the protection of the State."

This principle is based on equality and justice and lays down the moral foundation of the tax system. Equality here does not imply that every tax-payer should pay at the same rate proportioned taxation, i.e. a tax which is levied at the same rate on all incomes would not be a just tax. The canon of equality implies equality of sacrifice, and equality of sacrifice means that the amount of tax paid should be in accordance with the ability of individual tax-payers to pay. This leads to progressive taxation under which people with higher incomes, who enjoy a greater ability to pay, pay higher rates than others.

Adam Smith had made this amply clear: "It is not very unreasonable that the rich should contribute to the public expense not only in proportion to their revenue but something more than that proportion." Thus Adam Smith's canon of equality points towards progressive taxation in which equality of sacrifice is related to the ability to pay, and this, of course, implies that those with a larger ability to pay should pay taxes at a higher rate.

- ii) **Canon of Certainty:** Adam Smith wrote: "The tax which each individual is bound to pay ought to be certain and not arbitrary. The time of payment, the manner of payment, quantity to be paid, ought all to be clear and plain to the contributor and to every other person. Were it otherwise, every person subject to the tax is to be more or less in the power of the tax gatherer, who can either aggravate the tax upon any obnoxious contributor, or extort, by the terror of such aggravation, some present or perquisite to himself."

Uncertainty in taxation, according to Adam Smith, encourages insolence and corruption. He regards this canon as very important for in his view a "very considerable degree of inequality is not near so great an evil as a very small degree of uncertainty." This is a fundamental canon, for all attempts at equality will prove illusory without the taxes being certain. The canon of certainty demands that there should be no element of arbitrariness in a tax. Nothing should be left to the caprice or sweet will of the tax collector and the tax-payer should be able to see for himself what he is required to pay.

- iii) **Canon of Convenience:** "Every tax ought to be levied at the time or in the manner in which it is most likely to be convenient for the contributor to pay it." The canon of certainty says that the time and the manner of payment should be certain. But the canon of convenience says that the time of payment and the manner of payment should be convenient. Taxes on consumers are very convenient. The consumer pays when he makes the purchase and at a time when he can afford to pay because the purchaser chooses his own time for purchasing. The manner is also very convenient for he has to make no special arrangement for paying a tax. He pays it when he buys the commodity. The tax is wrapped up in the price of the commodity.
- iv) **Canon of Economy:** "Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible, over and above what it brings into the public treasury of the State." One implication of the canon of economy is very obvious. The tax is economical if the cost of collecting it is very small. If, on the other hand, the salaries of the officers engaged in collecting the tax take a large portion of that tax revenue, the tax is certainly uneconomical. As far as possible,

as much should come into the State treasury as is taken out of the people's pockets. Nothing should evaporate on the way. If corruption or oppression is involved in frequent visits to the income-tax office and an unwelcome and odious approach by the taxing officer, the canon of economy is not satisfied.

The tax should also be economical in yet another sense. It would infringe the canon of economy, if it retarded the development of trade and industry in any manner. If incomes are subjected to a very heavy tax, saving may be discouraged, capital will not accumulate and the productive capacity of the community will be seriously impaired. This obviously would be uneconomical. A tax is economical if it does not hamper in any manner the prosperity of the country.

Taxes on harmful drugs and intoxicants are regarded as economical, because they not only bring income to the State, but also discourage unproductive expenditure. But taxes on raw materials are uneconomical, because they raise the price of the manufactured article and weaken the competitive power of the industry. Also every middleman goes on adding something to the tax that he has paid.

### OTHER PRINCIPLES

In addition to Adam Smith's canons of taxation, the following principles of taxation should also be observed:

i) **Fiscal Adequacy or Productiveness:** The State must live on the revenue raised from the people by means of taxes. The government should be free from financial embarrassments. It is, therefore, necessary that the tax proceeds should adequately cover governmental expenditure and governments should not run into deficits. The government should also not err on the side of excess. In their zeal to raise more revenue, they should not cripple in any manner the productive capacity of the community or impair the economic resources of the country.

ii) **Elasticity:** The canon of elasticity is closely connected with that of fiscal adequacy. As the needs of the State increase, the revenue should also increase, otherwise it will cease to be adequate. To meet an emergency or a period of strain, the government should be in a position to augment its financial resources. Some of the taxes should be capable of yielding more if need be.

iii) **Flexibility:** The canon of flexibility resembles that of elasticity but there is a difference between the two. Flexibility means that there should be no rigidity in the tax system so that it can be quickly adjusted to new conditions, and elasticity means that the revenues can be increased. Unless the system is flexible, revenue cannot be increased for changes would be difficult. Thus flexibility is a condition of elasticity. If a tax system cannot be altered without bringing about a revolution, it lacks flexibility.

iv) **Simplicity:** In the words of Armitage Smith, "A system of taxation should be simple, plain and intelligible to the common understanding". This principle is closely related to Adam Smith's canon of certainty and is essential if corruption or oppression is to be avoided. If a tax system is so complicated so that the tax-payer cannot understand how much he is to pay and why he is to pay it, discretionary authority will be vested in the hands of the tax-collectors and the door will be wide open to corruption and oppression.

v) **Diversity:** Another important principle is that of diversity. A single tax or only a few taxes will not do. There should be a large variety of taxes so that all the citizens, who can afford to contribute to the State revenue, should be made to do so. They should be approached in a variety of ways. There should be a wise admixture of direct and indirect taxes. In this manner, the canons of fiscal adequacy and equity will be better satisfied. But a great multiplicity of taxes will be bad and uneconomical.

vi) **Compatibility with economic and social objectives:** Considering the role that taxation is called upon to play in modern times, it is emphasized that the effects of taxation should be compatible with the economic and social objectives that the community has placed before itself and with the institutions and processes considered essential for the attainment of these objectives.

The neutrality principle, or 'leave-them-as-you-find-them' principle, no longer holds the field today. The taxation policy has to be more positive. It is intended to bring about economic stability and development besides the attainment of other political and social goals. In conjunction with economic controls and monetary measures, taxation has to be freely used to combat threats of economic instability and stagnation by means of a managed compensatory fiscal programme.

Mrs. Ursula Hick has chosen to emphasise three principles of taxation: The primary purpose of taxation is to finance public services; secondly, citizens should be taxed according to their ability to pay, based on their income, and family circumstances, and thus ensure social justice; and, lastly, taxes should be universal inasmuch as they should not discriminate in any manner between citizens in the same financial position, so as to ensure equality before the law. Apparently Mrs. Hick, either consciously or unconsciously, is more concerned with matters relating to social justice and equality before the law than with the rights of tax-payers, or the effects of taxation on production, savings and investment, or the administrative problems involved in taxation by public authorities.

### IN UNDER-DEVELOPED COUNTRIES

In the case of under-developed countries the following principles of taxation need to be considered in the light of the prevailing economic conditions:

- i) Economic surpluses should be mobilized through taxation and used for productive investment. Here the main problem is to discover the surplus and channel it into investment without destroying or restricting private capital formation and investment.
- ii) Every person should be made to contribute to public revenue in accordance with his unused capacity or ability to contribute to economic development. This has been advocated in India but this principle should be used with great care in order not to penalise savings by the tax payer or impair entrepreneurship.
- iii) Taxation should be mobilized to realize the surplus that arises as a result of the developmental efforts. In the earlier stages of development consumption should not be permitted to increase proportionately with incomes.
- iv) The income elasticity of taxation should be high, that is, as incomes rise the share of taxation in the increased total income should also rise.
- v) If taxation is used as a tool for promoting economic development then equity demands that the burden involved in accelerated economic development be distributed equitably among the various sections of the population.

### Nature of taxes

The nature of taxes can be better appreciated by discussing them in the following groups: Direct and indirect taxes; Proportional, progressive and regressive taxes; specific and *ad valorem* duties; taxes on income including the corporation tax; taxes on capital (wealth tax, estate or death duty and inheritance tax, and capital levy); property taxation; and on outlay (customs duties, sales tax, and excise duties). It should always be remembered that a tax is a compulsory contribution to the State, or, as Bastable puts it, "a compulsory contribution of the wealth of a person or body of persons for the service of the public powers"

**DIRECT AND INDIRECT TAXES:** Direct taxes are imposed on the person or body who is intended to pay it, that is, the burden of taxation cannot be shifted. Direct taxes are always levied on income or capital. Income-tax, corporation tax, surtax, profits tax, wealth tax, estate or death duty, inheritance tax, stamp duty, and property tax are examples of direct taxes.

Indirect taxes are ultimately borne by consumers when they buy goods and services, but they are paid initially by producers, importers, exporters, wholesalers, retailers, etc. Sales or purchase tax, import duty, export duty and excise duty are the main examples of indirect taxes.

## Incidence of taxation

This leads to the all important problem of the impact and the **incidence of taxation**. The formal incidence of taxation or the impact of taxation is where the tax is first paid, from which the point of burden may be moved. The effective incidence (also commonly referred to only as incidence) is where the tax ultimately falls, that is, on the person or body who actually pays it. In the case of direct taxes, which are levied on income and capital, the impact (formal incidence) and incidence (effective incidence) occur at the same point. But with indirect taxation, impact and incidence do not coincide and a part or the entire amount of the tax burden is **shifted** elsewhere.

The following points deserve to be carefully noted in relation to the problem of incidence of taxation:

- i) The burden of taxes on income and capital, which are direct taxes, cannot be shifted, particularly in the short run.
- ii) The extent to which the burden of taxes on commodities and services can be shifted depends, other things being equal, on their elasticity of demand and elasticity of supply. The more elastic the demand for the object of taxation, the greater the incidence of the tax on the seller and the more elastic the supply of the object of taxation the greater will be the incidence of the tax on the buyer. Cases of absolutely inelastic demand are very rare; the demand for luxuries is generally more elastic than that for necessities. Also the demand for new durable goods is generally more elastic than the demand for commodities which are quickly consumed and are of a perishable nature. The supply of commodities is generally elastic and much more so in the long run. After production has been adjusted to changes occasioned by the imposition of a tax the incidence will be upon buyers and not upon sellers. Thus the effective incidence of a tax is divided between buyers and sellers in the proportion of the elasticity of supply of the item taxed to the elasticity of demand for it. If both are equal then the burden of the tax is equally shared by the buyers and the sellers.
- iii) A country, region or group of countries, which produces a large part of the supply of some essential commodity, could make the rest of the world pay the entire or a very large part of the export duty imposed on this commodity.
- iv) In the case of products produced under monopolistic or oligopolistic conditions there will be some difference with regard to the incidence of taxation. If the tax is fixed and its total amount is independent of output, then prices will not be raised and the incidence of tax will be wholly on the monopolist. If the total amount of tax imposed diminishes as output increases then it could well be that the monopolist increases his production and lowers his price. In the case of imports, a monopolist can be made to bear a part of the incidence of the tax by imposing the tax in the form of a fixed payment for a given period of time. But a monopolist is generally in a position to shift the burden of taxation to his customers by a more rigorous exercise of monopoly power.
- v) The notion that the incidence of a tax on the value of land falls entirely on the landlord assumes that he is securing the highest rent he can obtain for his land. If this is not so he could very well raise his rents to the prevailing level. Again, the ability of shopkeepers to shift the burden of property and other local taxation to their customers depends on whether these customers restrict their shopping to the neighbourhood.
- vi) Generally speaking, the consumer is required to pay not only the amount of tax but also the sum lost in interest by the person who initially paid the tax. The price of the item will thus rise by more than the tax.
- vii) When a commodity is being produced under conditions of increasing returns (where cost of production per unit diminishes as production increases), the imposition of a tax will lead to the price of the commodity being raised by more than the tax because increased price means decreased demand and a decreased supply means increased cost of production.

- viii) The social insurance contributions of workers are akin to a tax on wages and their burden cannot be shifted. Since the demand for labour is more elastic than its supply, the social insurance contributions of the employer either contribute a charge on wages or are added to the cost of production; the employees are generally in a position to shift the burden of this contribution either to the consumer or to the employer.
- ix) The adage that "an old tax is a good tax" is based on the assumption that a tax which has been imposed for a long time does not impose any burden on anybody. This argument is fallacious as the burden of the tax does fall on somebody and they would enjoy a direct monetary benefit if it were to be withdrawn. Another fallacy of a similar nature relates to the "doctrine of capitalisation of taxes". The argument states that taxes on permanent sources of income (land, property, government securities) depress the selling price of these sources only when they are imposed and that the burden is not transmitted to the subsequent purchasers because they pay less, knowing of the existence of the tax. But the point is that they pay less because of the presence of the tax, and if it were to be repealed, the owner would gain in terms of income or value of the property or of both. The incidence of the tax is, therefore, on the owner of the property.

Both direct and indirect taxation are an integral part of an adequate and equitable tax system and no single country in the world relies exclusively on any one of them. A Scotman is reported to have remarked that he could never think of direct and indirect taxation except as two alternative sisters introduced into the gay world of London, each having an ample fortune, both having the same percentage in the form of Necessity and Invention and differing only as sisters do. The Scotman in question may have exaggerated but his appraisal is quite tell-tale.

### ADVANTAGES AND DISADVANTAGES OF DIRECT TAXATION

The advantages and disadvantages of direct taxation can be summarised as follows:—

#### *Advantages*

- i) They are more equitable, as they can be made progressive.
- ii) They are economical as the cost of collection is small.
- iii) They satisfy the canon of certainty since the amount the tax-payer has to pay is known and the total amount due can be calculated with precision.
- iv) They are reasonably elastic, particularly in the developed countries and they can be made to respond to the needs of the State.
- v) They create a civil consciousness amongst the tax-payers and a feeling of personal participation in the affairs of state.

#### *Disadvantages*

- i) They are inconvenient to pay and every tax-payer feels the pinch. The filing of returns adds to the frustration and harassment. The practice of requiring payment in lump sum also creates hardships.
- ii) They can be evaded and high rates of direct taxes in effect constitute a tax on honesty.
- iii) Direct taxes adversely affect savings, investment and economic growth. They discourage entrepreneurship.

### INDIRECT TAXES: MERITS AND DEMERITS

The main merits and demerits of indirect taxes are as under:

#### *Merits*

- i) Indirect taxes are convenient as the tax-payer pays when he buys the commodity or service and he will only buy it when he can so afford. The tax is wrapped in the price

#### *Demerits*

- i) They are relatively uncertain as the repercussions of indirect taxation are difficult to estimate precisely.
- ii) They are regressive in the sense that all

- of the commodity or service.
- ii) It is difficult to evade an indirect tax.
- iii) Indirect taxes can be made equitable by charging higher rates for luxuries as compared to necessities.
- iv) The yield from indirect taxes can be very elastic when they are imposed on necessities or on those items whose demand is inelastic or relatively less elastic.
- v) They can regulate consumption in accordance with social objectives.
- vi) Indirect taxes can be used as instruments of industrial and trade policy and can also play a crucial role when it is considered desirable to use compensatory finance.

- classes are required to pay the same tax at the same rate for the same commodity. A tax imposed on the necessities of life is the most paying from the revenue point of view but it is the most regressive from the point of view of equity and justice.
- iii) They do not promote civic consciousness.
- iv) The cost of collection of certain types of indirect taxes can be quite heavy, although in under-developed countries it is generally more economical to collect indirect taxes as against the amount really due of direct taxes.
- v) The incidence of indirect taxes is passed on to the consumer and the amount so passed on is far in excess of the tax imposed on account of the piling-up process at various stages.

A good tax system must draw up a fine balance between direct and indirect taxes in which all classes of people in the country contribute according to their ability to pay. A premium should not be put on honesty and the moral fibre of the tax-payer should not be stretched to a point where he may feel inclined to reap the awards associated in that sport which is called evasion of taxation. Savings, investment, economic growth and entrepreneurship should not be penalised. And above all, states should learn the historical lesson from the fate of Rehoboam and the Jewish Monarchy three thousand years ago.

### PROPORTIONAL, PROGRESSIVE AND REGRESSIVE TAXATION

A **proportional tax** is one in which the rate of tax is the same, irrespective of the size of the income. The tax liability as a percentage of income is the same in all cases. In absolute terms the rich pay more by way of taxes as compared to the not so-well-to-do because they have a higher income but the rate of tax is the same for both the rich and the poor.

A **progressive tax** is one where the rate of taxation increases as capacity to pay increases. The principle of progressive taxation goes back to Adam Smith who said that "it is not unreasonable that the rich should contribute to the public expenses not only in proportion to their revenues but something more than in that proportion." Income-tax, surtax, wealth tax and estate duties are illustrations of progressive taxation which is justified on the ground of diminishing marginal utility. The marginal utility of a large income is less than that of a smaller income, so that a higher rate of tax he paid on a larger income with no greater real sacrifice. Direct taxes are almost always progressive in nature and the higher the income, the higher the ability to pay, and therefore the higher the rate.

Progressive taxation did not find favour with the earlier Economists such as John Stuart Mill who described it as "an entirely unjust mode of taxation and, in fact, a graduated robbery". Mr. Culloch advocated proportional taxation and went to the extent of saying : "when you abandon the plain principle (of proportion) you are at sea without rudder and compass and there is no amount of injustice you may not commit." According to the principle of equality of sacrifice, proportional taxation is justified if the marginal utility of income decreases slowly as incomes increase, and this is not so. Progressive taxation is justified not only on account of the decrease in the marginal utility of income when incomes increase, but also on account of the assumption that as incomes increase a proportionately larger amount is spent on luxuries. Taxing the rich thus compels them to reduce the consumption of luxuries. Progressive taxation is also justified on the following grounds:—

- i) It yields greater revenue and is therefore more productive.
- ii) It is more economical since the cost of collection does not increase as the rate of tax increases.

- iii) It is more equitable and places the heaviest burden on those better able to bear it.
- iv) It gives the tax system elasticity and flexibility since a little increase in the rates can increase revenues substantially.

Progressive taxation has a number of sound and powerful critics.

- i) My distinguished teacher at the London School of Economics, Professor Lionel Robbins, regards the use of the principle of diminishing marginal utility in this field as entirely illegitimate and unscientific. He says: "There is no means of testing the magnitude of A's satisfaction as compared to B's... Introspection does not enable A to measure what is going on in B's mind, nor B to measure what is going on in A's." While supporting progressive taxation its proponents assume that people with the same income enjoy the same satisfaction from it. This assumption cannot be proved to rest on ascertainable facts because satisfaction is difficult to measure. As Robbins puts it: "It would be rather silly if we continued to pretend that this justification of the scheme of things was in any way scientific."
- ii) Progressive taxation is arbitrary and the degree of progression is decided by the Finance Minister without any definite or scientific basis.
- iii) The principle of progression cannot be justified on the ground of promoting welfare because welfare is subjective and cannot be measured.
- iv) Progressive taxation strains to the limit a person's basic honesty and encourages evasion.
- v) Progressive taxation discourages savings (because people in the higher income brackets are better able to save), investment, growth and entrepreneurship.

Whatever be the merits and demerits of progressive taxation people will have to learn to live with it in order to satisfy our moral conscience. But public finance officials would do well not to completely pluck the goose which lays the golden eggs. Beyond a certain point progressive taxes are counter-productive and they lead to stagnation in economic growth and investment.

**Regressive taxes** are those where the burden falls more heavily on the poor than on the rich. They are the opposite of progressive taxes and no civilised government levies them. There are, however, certain taxes, which mainly affect the poor, such as the salt tax, excise duty on matches and kerosene oil, and sales tax on cheap cigarettes. Regressive taxation works unfairly as it takes from an income a greater proportion as that income diminishes. Indirect taxes on necessities are of a regressive nature since they bear no relation to the consumer's ability to pay.

## TAXES ON INCOME

Income-tax is usually taken to mean a tax on the incomes of individuals. The term also embraces the incomes of companies in which guise it is called a companies tax or corporation tax. Income-taxes are often referred to as the most outstanding contribution of popular government and liberal political philosophy to modern fiscal practice.

The personal income-tax merits a good rating because it can be used for achieving major objectives of fiscal policy better than most other taxes. In comparison with other taxes, a personal income-tax has few unfavourable impacts upon resources allocation and it is relatively easy to determine its incidence and thus to forecast its effects on income distribution. Further, this tax can be made relatively flexible, thus permitting the exercise of a measure of flexibility in the fiscal system through taxation. Income-taxes do adversely influence decisions to save and invest, but personal income taxation is levied so that it affects all income opportunities in about the same degree and if incomes from all sources are taxed at about the same rates, the tax will not influence the price pattern and resource allocation.

The personal income-tax creates certain problems in practice which relate to defining income for tax purposes, minimising evasion of taxation, determining the proper progressive rate structure, and coordinating personal income-taxes with other taxes. The period of assessment of income-taxes is generally one year.

There are three main concepts of taxable personal income:

- i) Income as a "service-flow" in consumption implying the value of all goods and services

consumed by an individual in a given time period. Under this definition, expenditure on durable goods (whether of a capital or consumer nature) would constitute savings and would not be taxed. This concept would permit savings to be exempted from payment of income-tax, whereas such savings represent an increase in economic power and in the ability to pay. Such a tax on consumption is useful for curbing consumption but it is not in accordance with the cardinal principle of levying taxes according to ability to pay.

- ii) The concept of Income as "recurrent receipts" was emphasised by Carl Plehn who stressed three characteristics of income—receipt, anticipated recurrence, and expendability. On this basis, incomes include wages and salaries, interest and rent, annuities and pensions, and dividends on shares. Savings out of current income are covered under income in Plehn's concept. Non-recurrent items, such as capital gains and losses and receipts from gifts and inheritance, are excluded from Plehn's purview of income. Plehn's concept approaches the modern view except for the matter of excluding non-recurrent items which, in effect, do increase economic power and, therefore, the ability to pay.
- iii) The most widely accepted concept of income is that of the net addition to an individual's economic power within a specified period of time. Under this concept income would mean all types of receipts or accruals in purchasing power to the individual between two points of time, less expenditures necessary to obtain this income. This concept is useful to apply to income-tax based on relative personal ability to pay, as it covers the totality of changes in purchasing power including capital gains and losses, gifts and inheritance. It is, however, difficult to apply this concept to determine the amount of taxable income because of difficulties relating to measurement of "income in kind" and taxing unrealised capital gains or losses. Further, traditionally gift and inheritance taxes have been levelled at rates far below those applied to personal income-tax and any reversal of this practice would raise violent opposition.

Evasion of personal income-tax can be either legal evasion or illegal evasion. Illegal evasion is a separate matter and it is not dealt with here. Legal evasion on income not reported is made up of income which avoids the tax base because it is below the personal exemption level, because it is privileged (as in the case of tax-exempt incomes) and because it is reinvested by corporations (corporate savings). Personal deductions from gross income (after allowing for business and professional expenses) are permitted by income-tax laws and include other taxes paid (mostly provincial and local taxes), interest on debts, extraordinary medical expenses, contributions (within specified limits) personal allowance and children's allowance, and investment allowance (within specified limits).

There are two other popular methods of legally evading the rigours of a progressive personal income-tax. One is the establishment of a trust and the other is that of the personal holding company. In a trust the tax-payer's income-yielding property is committed to a trust operated by trustees in which payments to beneficiaries are made in accordance with the provisions of the trust. This enables an individual with a large income to split it so successfully that he avoids the progressive rates of income-tax and yet manages to retain working control over the property, which provides the basis of income for the trust funds. In the case of a personal holding company, an individual receiving a large income can delegate all his income-yielding property to a holding company which he incorporates. Since Corporation taxes are far less than the top rates of personal income-tax, this individual is able to avoid a substantial amount of income-tax. At the present time trusts and personal holding companies are under sharp surveillance by fiscal authorities and their days, in the form in which they presently perform, are limited.

The determination of the proper progressive rate structure to personal income-tax is indeed a challenge for the Finance Minister who must (at one and the same time) ensure equity and justice in the distribution of the burden of taxation as well as provide effective and meaningful incentives and opportunities for savings, investment, economic growth and entrepreneurship. Unfortunately, both these valid objectives require the pursuit of diametrically opposite policies. The Finance Minister has to find a happy mean between the demands of equity and those of sustained economic growth. It is also important to coordinate personal income-taxes with other



taxes in order that the tax-payer is really paying an overall tax bill which is in accordance with his ability to pay. The highly progressive rates of personal income-tax should be evaluated in the light of the wealth tax, property taxes, and indirect taxes on luxuries and comforts to which an individual is subjected. To this last can also be added the corporate tax already levied on his investment income. Tax exemptions or lower rates of personal income-tax on the middle and lower income groups should be appraised in the light of their other tax liabilities. In short, the total tax expected liability of an individual should be in accordance with his ability to pay; the imposition of progressive taxation on personal income should take into account the other taxes which are expected to be borne by these individuals.

## CAPITAL GAINS

Capital gains are generally taxed about the same rate as personal income and in some cases they are added to personal income in order to arrive at the taxable income. Capital gains generally have the following characteristics:

- i) Capital gains are a minor source of income in the economy and they are received by relatively few tax-payers.
- ii) They are a major source of income for particular individuals, who derive substantial amounts from them.
- iii) Realised capital gains and losses are not regularly recurrent. They have a longer periodicity than one year, and can occur over a decade or more. Actually, if the inflationary fall in the value of money is taken into account, the end-calculation may well be a capital loss rather than a capital gain.
- iv) Realised capital gains are frequently converted into new investments and realised losses are converted into new investment of a lesser value than the original; neither is reflected in the recipient's scale of living.
- v) Realised capital gains and losses may be manipulated to some extent to suit the tax-paying interest of the recipient.
- vi) Capital gains provide a major attraction for inviting risk capital. This takes on added significance in the under-developed countries.

On purely logical grounds a convincing case can be made out for including realised capital gains and losses in taxable income. It can be argued that capital gains and losses result from the sale of assets and this resembles an ordinary trading profit; that corporate savings can be realised to the stock-holder in the form of capital gains, and that if depreciation and obsolescence of physical capital are negative income, the depreciation and appreciation of investment assets should enjoy the same status. Despite all this a strong case can be built up for giving some special treatment to capital gains and losses with the object of promoting investment and risky but worthwhile enterprises. Capital losses which are realised should be treated as negative income. Capital gains which are realised within the first two years of investment should be added to taxable income, since the motivation in this case was primarily of a speculative nature. Realised capital gains which accrue after two years of investment should be taxed at a rate not exceeding 25 per cent of the gain.

## COMPANIES TAX

Corporate or companies tax is imposed on the income of a company prior to the distribution of profits. In the U.K. the corporate net income-tax is mainly a device for collection at the source and stockholders are credited with the taxes collected from the corporation on their behalf. In the U.S.A. and in Pakistan the stockholder is not allowed any credit for the corporate tax. The principle of ability to pay, when translated into graduated rate of taxation, can be applied to natural persons but not to corporate entities. Whether corporations have a soul or not is a debatable point, but the doctrine of equity can be applied more logically to the corporation as an association of individual stock-holders than to it as an entity in its own right.

Again, corporate income as such does not indicate a rate of return on the capital invested. The case for a corporate income-tax can be justified from two angles—the benefits received and

the cost of the corporation to the government. Both these arguments are fallacious. It is not very logical to apply a cost doctrine only to corporations that make a profit. The argument that corporations receive special benefits from government such as the limited liability of shareholders (this means that stockholders are not liable for the debts of corporations as are partners for debts of partnership) cannot hold water because these legal privileges are available to all for the asking, and under free competition their value is not much. Corporation taxes can be legitimately defended on grounds of social control; the taxation of intercorporate dividends is a step towards discouraging holding companies. The corporate income-tax with graduated rates or a specific exemption can be used to favour small companies. Generally speaking, corporate taxes are levied at rates upto 50 or 55 per cent of income. Undistributed profits, which are to be used for reserves and investment, are generally exempted from payment of corporate income-tax; in any case they should only be taxed at a much lower rate as compared to that applied to distributed profits. It is only reasonable that corporations should have access to their own earnings for capital.

Jurisdiction over individuals and corporations for purposes of assessing and realising income-tax sometimes involves serious political problems. The question arises whether jurisdiction is of the area where the recipient of the income is domiciled or where he earns the income. Where personal and corporate income-taxes are shared by the Central and Provincial governments this question can become a fairly serious source of friction. Generally, the domicile principle is accepted in practice.

## TAXES ON CAPITAL

The major taxes on capital are the Wealth Tax, Estate or Death Duty and Inheritance Tax, Gift Tax, and Capital Levy. All these are direct taxes. Their formal and effective incidence is on the same person and the burden of capital taxes cannot, by and large, be shifted. Taxes on capital like income-taxes can be adjusted to ability to pay; some difficulty does arise because like capital does not yield like income. The ownership of capital, apart from providing income, also provides more security and opportunity over and above this income. When inherited wealth is a major cause of income inequality, progressive capital taxes do tend to redistribute incomes.

Against all these theoretical considerations favouring progressive capital taxes we must take into account the very real practical danger of capital consumption. This would lead to a reduction in the production base and there would be a deterioration in the country's provision for the future. This crisis can only be averted if capital taxes are accompanied by a proportionate increase in real investment. Highly progressive rates of capital taxation along with highly progressive rates of income taxation may result in a better distribution of income and wealth, but it will only be accomplished at great cost to the economy in terms of savings, investment, economic growth and entrepreneurship.

Wealth taxes are becoming increasingly popular in under-developed countries. The motive in this case is a political one. The only developed country which has introduced the wealth tax in recent years is the U.K. and even there the exemption limit is quite high (£100,000). The wealth tax is levied on an annual basis and it is quite steeply graduated. The exemptions are rather limited and it generally starts operating from a fairly low wealth base, considering the impact of inflation on the values of income-earning investments which are assessed at market value. In the presence of highly graduated income-taxes and estate duties and gift taxes, the existence of a wealth tax is a fiscal anomaly. It does not solve any problem barring encouraging lawlessness in the form of tax evasion or providing an opportunity for corruption or for harassing people who are not in favour with the powers that be.

A capital levy is in the nature of a once-for-all tax on capital designed to meet some dire emergency. Its unforeseen nature forces people to sell their assets in order to meet their liability. In practice instalments are arranged, as forced sales on a large scale would depress capital values quite substantially. The payment of a capital levy involves not only loss of income but also loss of security and opportunity. The economic effects of a capital levy will depend on a host of considerations, including the timing, the place where it is levied, political conditions, fiscal circumstances and the state of the economy. A capital levy is in the nature of a major surgical

operation which will "either kill or cure." While the initial effects of a levy should be deflationary, if the levy is paid by bank borrowing the effect will be inflationary. The levies imposed in the twenties after World War I turned inflationary; in the absence of exchange control there was a tremendous flight of capital and governments had to resort to both borrowing and printing of notes. The only reason, other than a dire emergency, for imposing a capital levy is for paying off the National Debt because either the debt is too large or its annual cost of servicing is very high. These arguments are not really valid since interest on the National Debt is subject to income-tax and the holders of the National Debt are liable to wealth tax and death duty on these holdings. In modern times a capital levy is almost unthinkable, except at the hands of an immature and reckless government.

## DEATH DUTIES

Death duties assume two forms—estate duty or inheritance duty. Estate duty describes a tax upon the entire estate left by the deceased, while inheritance tax is applied upon the separate shares of the estate transferred to the beneficiaries. Both are graduated cases and an attempt is made to apply the principle of ability to pay. Gift tax is primarily intended to avoid transfers before death in order to accomplish substantially the equivalent of a tax-free inheritance. If there is theoretical and practical justification for death duties there is approximately identical justification for the taxation of gifts *inter vivos*. A peculiar aspect of the gift tax is that although it is applied annually to gifts made in that year, it applies progressive rates on a basis comparable to those of the estate duty which is paid only once on a given estate. One of the main problems associated with death duties and gift taxes is the question of evaluating the market price of the assets involved. In most cases these would require specialists of integrity who are hard to come by.

The pros and cons of death duties are indicated as under:

### *For Death Duties*

- i) A person possesses the right to determine how his property shall be distributed upon his death (not strictly true under Islamic Law). The transfer of property in an organised society requires the intervention of government and death duty is the payment made to government for guaranteeing the distribution of estate according to the wishes of the decedent.
- ii) Government is a silent partner in the creation of all value and therefore has a claim in the distribution of the estate.
- iii) Death duty can be an instrument for collecting taxes evaded by the decedent in his lifetime.
- iv) Inheritance of property gives the beneficiary assets which create an ability to contribute to government in addition to the ability to pay other taxes. This is the generally accepted principle justifying death duties.
- v) Death duties lead to a redistribution of wealth and of inequality of opportunity and thus partly vitiates the criticism that private property tends to create unequal incomes and highly unequal distribution of economic power. It should be noted though that in-

### *Against Death Duties*

- i) Death duties adversely affect savings. They attach the country's capital or potential capital and thus reduce the productivity of the economic system. If seed is sold as grain, there will be nothing left to sow in the next season. Yet some people work and save merely because of the creative efforts involved and not just to add to their incomes or pass on a greater inheritance to their children. But this is generally not so, and in under-developed countries in particular the desire to pass on the benefits of their fortune to the family is an extremely powerful motivation. Freedom to transfer and dispose of wealth is a necessary incentive to the accumulation of wealth. Without it, after accumulating a certain amount of wealth, people will spend their time and money in idleness, waste and riotous living.
- ii) Death duties consume capital. This is particularly true of this tax as it largely falls on the rich who tend to save more than the poor. Death duties discourage capital accumulation somewhat more than income-taxes, but the difference between the two in this respect is not much. Death

heritance is but one among many factors contributing to inequality of wealth and inequality of wealth is but one factor is influencing the inequality of incomes.

- vi) Capital can be conserved by public expenditure as happens when government investment in durable goods exceeds revenues from death duties.

duties on account of their remoteness are probably more inimical to enterprise incentives than income-taxes. The situation can become aggravated when death duties entail that those who have inherited the property have to divest themselves of some constituents essential to the productive process of that property in order to meet the death duty liability.

- iii) Death duties undermine their own base because their productivity depends on large fortunes which these very taxes would destroy.
- iv) Besides the taxes, death duties imposed an additional burden since the necessity of sudden liquidation of the estate may break the market causing heavy losses.
- v) Death duties undermine philanthropy if they cover gifts and bequests to educational and health facilities and charities. Generally such gifts and bequests are exempted from payment of death duties.

Evasion and avoidance of death duties takes place mainly through migration, gifts, and the creation of limited interests in estates so as to avoid taxable transfers. Gifts in contemplation of death or those which take effect at death are subject to death duties. Integration of gift and death taxes would close a major source of evasion. The death duties are here to stay and it is, therefore, imperative that they should be rationalised in accordance with prevailing conditions, including the presence of other progressive taxes and the desirability of accelerated capital accumulation.

## PROPERTY TAXATION

Property taxation refers to taxes levied on any kind of property. Generally the connotation of property is limited to real estate. Property taxes are only used by provincial and local governments. They are the backbone of the revenues of local authorities. Property tax is impersonal in character since it follows the location of the property; security for collection is the property itself; the tax is proportional rather than progressive; and no account is taken in one jurisdiction of what the tax-payers may own in other jurisdictions. Although the ownership of property can be taken as a satisfactory index of ability to pay, yet this can only be measured in terms of income and there is a very poor correlation between the amount of income and the amount of property owned. The justification for property taxation can only come from the benefit principles. Property taxes are generally justified on the basis of benefits provided by police and fire protection, streets, side-walks, sewers, garbage removal, parks, libraries, museums, and public education and health facilities. Benefits do accrue to property from the provision of these services but it is really difficult to identify the equation between the benefits to a particular piece of property and the amount of taxes paid on it. Special assessments on property for peculiarly beneficial improvements which enhance the value of property are another matter.

There are four steps in the administration of property taxation:—

- (i) **Assessment**—Property is valued either by capitalisation of current income, or appraisal of present value of anticipated income, or market prices at which similar properties are being sold or can be sold. Government property and property belonging to non-profit organisations are generally exempt from property tax. It is essential that assessment should be centralised, the fossilisation in assessment personnel and assessment

procedures is eliminated, and the assessment formulae made simple and subject to change according to variations in the value of property.

- (ii) **Equalisation**—This should iron out injustice in assessment.
- (iii) **Apportionment**—Apportionment is the process of determining the rates of property tax to be imposed by various levels of government upon a given piece of property.
- (iv) **Collection**—The final stage in the administration of property taxation is collection, and in the case of a fairly large proportion of local authorities this stage is characterised by inertia and lethargy, sometimes for considerations involving local politics.

The incidence of property taxation is generally shifted back and imposed upon the seller of the property in the form of capitalisation of all anticipated property taxes. When property is used for business purposes, there may be forward shifting in the form of increased rent. Not all property taxes are shifted backward or forward and must partly be borne by the owner himself.

## TAXES ON OUTLAY

Taxes on outlay are indirect taxes. They are also referred to as commodity taxes or consumption taxes. Matters relating to the advantages and disadvantages of indirect taxes and their incidence have been discussed in an earlier section of this chapter. The most popular outlay taxes are customs duties (tariffs), excise duties and sales tax. These business taxes are in effect sales taxes, and, apart from customs duties, include taxes on the production, sale or use of particular goods; turnover or general sales tax and retail sales taxes.

**Customs duties** comprise import duties and export duties. Business taxes can be either *ad valorem* (levied on the value of product or service) or specific (levied with reference to a particular physical quantity). Outlay taxes are levies paid by the consumer in the price of the services and commodities which he purchases. The incidence of outlay taxes has been discussed earlier in this chapter; suffice it to say here that they are intended to be paid by the consumer and there is a strong probability of their being so shifted. Customs duties (tariffs) have also been covered in paragraphs 51 and 54 of Chapter 19 dealing with international trade. Customs duties were extensively used in the Middle Ages and their popularity continues unabated in the developing countries. In the developed countries serious and sustained efforts are being made to reduce and eliminate tariffs through institutions like GATT, IMF, ECM and EFTA. The action so taken to liberalise international trade is now beginning to be looked upon with some favour in the developing world, but the progress there is limited on account of the balance of payments situation and the national urge to protect domestic industry. Customs duties continue to constitute an important source of revenue and are increasingly used as instruments of fiscal policy for regulating international trade, protecting domestic production, and for promoting economic growth as also for salvaging the social conscience (such as restrictions on imports of drugs and liquor).

**Excise duties** are generally levied on manufactured goods and are imposed at the production or factory stage when the product or service is ready to be marketed. The most popular excise duties are those levied on petroleum products, liquor, tobacco, and miscellaneous luxuries. In underdeveloped countries the base of excise duties extends to a host of manufactured goods including necessities such as matches.

Of all taxes **sales tax** is amongst the earliest. Even in Roman times the Emperor Augustus levied a tax of one percent "upon all articles, movable goods or fixtures, sold in the markets or by auction." The modern European sales tax grew out of the conditions created at the end of the first World War. These turnover taxes were broadbased and some even included receipts from the liberal professions as well as business receipts.

According to Professors Haig and Shoup no other tax in the history of public finance has spread so swiftly over the world, save perhaps the one on gasoline. Sales taxes differ widely in coverage. The exemptions either relate to commodities, such as food items, seed and fertiliser, or relate to institutions such as religious and non-profit organisations. The most common justification of the sales tax is that "it brings in the money"; otherwise it is by no means a good tax.

The most serious criticism of the sales tax is that it is a multiple tax involving many problems of administration and equity. The problems become really acute when the number of turnovers in an integrated industry is less than in one made up of independent units. In the U.S.A. another problem involved in state sales taxes is the federal prohibition of state sales taxes on interstate commerce. Although the administration of the sales tax is facilitated by the fact that such taxes have a broad base, and can therefore carry a relatively low rate, yet its administration raises serious difficulties. It is sometimes so very complex to interpret and implement that in the case of the French turnover tax "no levy known upto that time demanded from tax agents more sustained vigilance, greater perspicacity, keener knowledge; none raised more delicate and even more difficult questions of interpretation; none necessitated such extensive and diverse information." Heavy internal consumption taxation has never been supported in free societies, be they Islamic or Buddhist or Anglo-Saxon. Professor Seligman has, in this liberal tradition, aptly condemned the sales tax: "The sales tax constitutes the last resort of countries which find themselves in such fiscal difficulties that they must subordinate all other principles of taxation to that of adequacy."

Outlay taxes are generally favoured because they are convenient to pay. Since they involve an automatic instalment plea and are concealed in prices, they are easy to administer, they evoke civic consciousness as everybody is required to contribute, they can be used both for raising revenue as well as for purposes of fiscal policy, and they complement the progressive taxes on income and capital. The main criticism of outlay taxes is that they are a regressive form of taxation.

### DISTRIBUTION OF THE BURDEN

Before plunging into a discussion of the burden of taxation, it should be emphasised that Seligman's concept of a tax as "a compulsory contribution from the person to the government to defray expenses incurred in the common interest of all without reference to special benefits conferred" should be slightly modified by changing "without reference" to "with little reference." This would give a broader base to the consideration of matters relating to the burden of taxation and its effects, as also the concept of taxable capacity.

It would also be worthwhile recalling in this context that the objectives of taxation are basically twofold: first, the time honoured purpose is to raise revenue and, secondly, but more significantly, to regulate and control the economy. This second objective is sometimes referred to as "sumptuary" taxation and represents all extra revenue objectives of taxation, including regulating the flow of national income. It should also be appreciated that all taxes are in the ultimate analysis paid out of income except when taxes and private expenditure put together exceed income, necessitating payment out of capital, and that in the case of a number of taxes the effective incidence does not rest on the person upon whom they are initially imposed. An analysis of the burden of taxation would have to presume that the incidence of the direct money burden of various taxes amongst different classes and individuals is ascertainable; considerations relating to the indirect money burden or the indirect real burden would have to be ignored. In allocating tax burdens society would be regarded as being composed of various broad classes. Although the burden of taxation is personal yet it is almost impossible to legislate for distributing the real burden equally among all individuals.

Tax measures, therefore, tend to deal with classes: urban and rural classes; upper, middle and lower classes; or income, propertied, producer and consumer classes. It should be rightly assumed, that in the words of Dalton, if "a given revenue is to be raised by taxation, the total direct real burden will be greater under some tax systems than others", and therefore, "the tax system should be so arranged as to make the total direct real burden as small as possible." This is the principle of minimum sacrifice which is also called the principle of equimarginal sacrifice. This principle would imply taxing only the largest incomes and "cutting of the heads of all the tallest poppies" (Edgeworth). Such a measure would be the death-knell of all economic activity and it could also be objected to on grounds of equity. Equity, it should be remembered, can be quite an elusive concept. It is by and large a matter of opinion, and, to quote Dalton, again, equity is "an elusive mistress, whom perhaps it is only the whim of philosophers to pursue

ardently and of politicians to watch warily." Nevertheless, whether we like it or not, we are stuck with the principle of securing an equitable distribution in the burden of taxation.

Three major alternatives have been advocated to ensure that the direct money burden of taxation is distributed equitably. The oldest are the Cost and Benefit Principles, while the third is the modern and generally accepted principle of ability to pay. The Cost Principle (which implies that taxes should be related to the cost to the public authority of the services rendered to individual tax-payers) and the Benefit Principle (which implies that taxes should be levied according to the benefits conferred by public authorities on individual tax-payers) are essentially alike. Both place the state in a quasi-commercial position. There is this difference though, that while the Cost Principle indicates a balanced budget, the Benefit Principle by no means carries this implication. The Cost and Benefit Principles can be applied to the supply of services like postal and telecommunications services, transport services, supply of electricity and gas, and perhaps in some cases to education, medical and municipal services (conservancy and supply of water). These principles can hardly be applied to services rendered out of the proceeds of taxes, as distinguished from prices. The Cost and Benefit Principles have also been criticised on account of the enormity of the difficulties involved in the measurement of cost and benefit and because of the limitations they place upon the scale of services to be provided by government.

The allocation of tax burdens among individuals on the principle of ability to pay would amount to an equalisation of the tax burden. The concept of ability to pay brings us as close as possible to the real tax base, that is, income. Dalton wrote this of the relationship between ability to pay and the principle of minimum sacrifice:

"The principle that taxation should be distributed between individuals in accordance with their 'ability to pay' is, on the face of it, somewhat more practicable. But how is 'ability to pay' to be measured? It is usual, in discussions of this question to consider 'sacrifice' to the tax-payer of paying his taxes, and then to deduce some scheme of distribution of the burden of taxation from some principle concerning sacrifice. The three most common of such principles are those of 'equal sacrifice', 'proportional sacrifice' and 'minimum sacrifice'. To these we may add a fourth, which is sometimes expressed by the injunction, 'leave them as you find them', or more precisely, 'do not alter the inequality of incomes by taxation.' At first sight it is not clear, on grounds of equity, which of these four is to be preferred.

According to the principle of equal sacrifice, the direct money burden of taxation should be so distributed that the direct real burden on all tax-payers is equal; according to the principle of proportional sacrifice, so that the direct real burden on every tax-payer is proportionate to the economic welfare which he derives from his income; according to the principle of minimum sacrifice, already referred to, so that the total direct real burden on the tax-payers as a whole is as small as possible; according to principle of 'leave them as you find them', so that the inequality of incomes should be neither increased nor diminished by taxation."

In order to apply any of these four principles, we must assume some relation between money income and the economic welfare derived from it. Assuming that the relation between income and economic welfare is the same for all tax-payers, Dalton emphasises that although this assumption is both unscientific and untenable it is an assumption made by civilised governments, administrators and politicians (as well as dictated by the demands of equity) and that the marginal utility of income diminishes fairly rapidly as income increases, that the principle of equal sacrifice leads to progressive taxation, the principle of proportional sacrifice to still steeper progressive taxation, and the principle of minimum sacrifice, as already pointed out, to a relatively high level of exemption and very steeply progressive taxation of those not exempt.

The principle of minimum sacrifice, indeed, gives this result, so long it is assumed that marginal utility diminishes at all with increasing income. Both equal sacrifice and proportionate sacrifice involve making all members of the community however poor (provided that they have some economic welfare to sacrifice) contribute something. But minimum sacrifice does not involve this. Further, the more rapidly the marginal utility of income is assumed to diminish with increasing income, the more steeply progressive must the tax system become, in order to give effect to either equal or proportional sacrifice.

Dalton goes on to argue that the principle of 'leave them as you find them' under which the inequality of income should be neither increased nor diminished by taxation does not lead to proportional taxation, and reasonable assumptions regarding the relationship between income and economic welfare point to progressive taxation.

An equitable distribution of the burden of taxation is necessary for political and administrative considerations. Equity in the distribution of the tax burden implies that the concept of ability to pay must be brought to bear fully on the tax structure as a whole. The principle of ability to pay in turn implies progressive taxation despite the unscientific and tenuous relationship between income and economic welfare as reflected in the diminishing marginal utility of money incomes. In fact, the choice between proportional taxation (which would levy a tax burden proportionate to the economic welfare enjoyed) and progressive taxation (based on the principle of equal sacrifice) is tantamount to choosing between certain injustice and uncertain justice. The choice is naturally the latter. It should, however, be assured that ability to pay is related to the tax system as a whole and not merely to individual taxes. The sum total of all taxes, whether on income or capital or outlay, paid by an individual should be such as can be related to his ability to pay.

While concluding the discussion on the burden of taxation it should be stressed once again that, apart from raising revenues, another basic and perhaps more important function of the taxation system is its useful "sumptuary" purposes. This is discussed in a later section. A conflict between the demand of equity and those related to the "sumptuary" functions of taxation is difficult to resolve, and in a free society the latter should generally take precedence over the former. Sometimes it is necessary for the principle of equality of sacrifice to yield to the "sumptuary" principle.

## EFFECTS OF TAXATION

Professor Neuin has well summed up the effects of taxation under three heads: allocation of resources, equity in distribution, and growth in the economy. First, taxes influence the allocation of society's resources amongst different kinds of goods and services. That is to say, the total levied in taxation determines how much private individuals and enterprise are prevented from consuming, and this obviously has a bearing on the allocation of the national income between private and social ends. Furthermore, the level and structure of taxation will influence the pattern of consumption (and investment) within the private sector. Secondly, taxes influence the distribution of the national income between various groups—rich and poor, old and young, parents and non-parents. Thirdly, taxes influence the aggregate output of society—that is to say, they effect the supply of productive resources coming into employment, the total level of demand for goods forthcoming and the growth in capacity and productivity from year to year. The Twentieth Century has seen taxation become a main instrument in the determination of economic policy (see Budget). But, beyond the main objectives of raising revenue, accelerating economic growth and the redistribution of income, taxes have long been used for specific purposes, such as the protection of infant industries, or special purposes.

The effects of taxation can be considered with reference to:

- (i) effects on production;
- (ii) effects on distribution;
- (iii) concept of functional finance and counter-cyclical taxation.

## EFFECTS OF PRODUCTION

Effects on production can be divided into effects on production as a whole, and effects on the pattern of production.

Effects on production as a whole operate through effects on work, saving and investment. These are, in turn, influenced by the ability and the desire to work, save and invest.

Investment makes for greater and more efficient production. Investment can be either material investment or investment in human capital. Investment in human capital makes the worker personally more efficient in a general way as also in terms of health, skill and technical knowledge.



Investment in material capital also adds to production and productivity by providing the worker with more efficient material to use in the production process.

Investment is only possible if there is saving and the Community refrains from spending all its purchasing power on current consumption. It is possible for the State to induce savings through deficit financing (which is discussed under National Debt) but in this case the equality between savings and investment will be brought about through charges in the level of income and prices. If savings exceed investment, there will be unemployment, business losses, falling prices and a recessionary or deflationary trend. If investment exceeds savings, a fuller level of employment would be accompanied by large business profits, rising prices and inflation. At the full employment level, consumption and investment are viable alternatives and if one increases the other must decrease, but with less than full employment both can increase together although a larger share for investment could be justified for increasing the efficiency of the production base.

**Taxation does affect the ability to work, save and invest.**

Any taxation which reduces a person's efficiency will reduce his ability to work. A strong case can be made against taxing the poorer members of the community for fear of impairing their efficiency and that of the progeny. This argument covers direct taxes on small incomes, including employees' contributions to social welfare and indirect taxes on necessities and some necessary comforts of life. Thus, on grounds of efficiency, even if the consideration of equity in distribution is ignored, it is a sound principle not to tax poorer sections of the community. Even for the upper income groups tax measures should not be so repressive as to hurt their ability to work and contribute towards economic progress.

The ability to save is reduced by all types of taxes in those cases where there is a margin of income to permit savings, and only in the case of the poor, who have no margin of saving, will there be no effect on ability to save. Heavy taxation on the upper income groups substantially reduces their ability to save. In the developed countries the main sources of savings, come from institutions (such as banks, insurance companies, pension funds, sinking funds, undistributed profits and budget surpluses) rather than individuals, although the importance of private savings can by no means be minimised. In the developing countries private savings continue to occupy a crucial position although institutional savings are also beginning to grow.

Lastly, the ability to invest is dependent on the resources available for investment, and these are clearly reduced by taxation. Budget surpluses and use of public expenditure for development and capital growth can, to a certain extent, counteract the adverse effect of taxation on ability to invest.

The effects of taxation on the desire to work, save and invest are in effect considerations of incentives and their co-relationship is quite controversial since it deals with human motivations, which are indeed as varied and as complex as one can imagine.

According to most economists and sociologists, taxation is not, generally speaking, a disincentive to work, but there continues to be a vocal minority which insists that taxation beyond a certain point induces people to devote more time to leisure. In Dalton's view, which the author shares, "... with most people taxation is not a disincentive to work, but an incentive, leading them to work harder than they would if there were no taxation. Taxation may be a disincentive both to individual saving and to investment. But it does not follow, of course, that every increase in every tax is an incentive to work and every decrease a disincentive."

The reaction of people to taxation should normally be governed by their elasticity of demand for income, or, to quote Dalton again, "by their elasticity of supply of efforts and sacrifices in terms of the income which can be obtained in return." Taxation would, therefore, be an incentive with an inelastic demand and a disincentive with an elastic demand. It is doubtful if the people's elasticity of demand for income is large except in cases where dependents have to be maintained and provision made for the future. To this list of exceptions can be added indulgences in "Vainglorious vulgarity" and the desire to accumulate wealth and economic power as evidence of success in life. Perhaps another exception would be saving out of corporate incomes where the problem of individual consumption does not arise, and where the top executives are more interested in continuing new investment instead of diverting surplus funds into other uses.

The effects of different taxes on the desire to work and save vary from tax to tax.

A tax which is expected to be of a temporary nature, to meet some emergency like war,

earthquake, or floods, will not adversely affect the desire to work and save as there would be valid expectation that it will not continue in the future.

Taxes on windfalls will also not have an adverse effect. During both the world wars the British excess profits tax was largely a tax on windfalls and the Chancellor of the Exchequer aptly described it as a perfect tax for a short war. A tax on a monopolist which does not induce him to change his production or selling price will also have a neutral effect.

Taxes on commodities the expenditure on which accounts for only a small portion of the marginal income of the tax-payer, will only be a slight disincentive, but the extent will be larger if the taxes absorb a larger part of his income, as is the case with entertainment and comforts and luxuries.

Income-tax and wealth tax will be a greater disincentive (particularly to savings) as compared to outlay taxes which fall on expenditure. Inheritance taxes would also be a disincentive, particularly in the under-developed countries where family ties are strong. In order to abviate the disincentive to saving it has been suggested that an **expenditure tax** should be introduced. On the recommendation of Professor Nicolos Kaldor (who succeeded Dr. Dalton at the London School of Economics), the Government of India has introduced an expenditure tax on all incomes exceeding 60,000 rupees per annum, over and above the basic income tax. The introduction of the expenditure tax has adversely affected the Indian economy; Kaldor's proposals were based on an insufficient knowledge of the economic and institutional structure of the country. Kaldor supports his tax proposals on the grounds of equity, economic effects, and administrative efficiency. According to him, from the point of view of equity, the most important consideration is that the tax system should not contain a bias in favour of particular groups of tax-payers; from the point of view of economic effects, the major consideration is that the tax system must be prevented from weakening unduly the incentive to work, save, and take risks; and from the point of view of administrative efficiency, the main requirements are simplicity and comprehensiveness, which make for ease of administration and at the same time prevent large-scale evasion of taxes. Kaldor thinks that the usual type of income-tax is very defective on all the three counts mentioned above: it is not levied in accordance with the real ability to pay by different tax-payers; it weakens the incentive to work, save, and bear risks, and, since it does not call for a comprehensive tax return, it opens up several ways of evasion. Kaldor is not, of course, the first economist to hold this opinion. Many other economists, from John Stuart Mill to Irving Fisher, have criticized income-tax as being unfair and harmful. Kaldor's arguments closely follow. He says that if income-tax is to be equitable, that is, to be fair as between different individuals in similar circumstances, it must be levied on a base that is a satisfactory index of the taxable capacity of the individuals. According to Kaldor, the present base of taxation, namely, 'income' as statutorily defined in most countries, including India and Britain, is defective and biased. It is not a true measure of 'means' or 'spending power' of different individuals. It is spending power, however, which is the true index of taxable capacity. The spending power of an individual in any given period of time depends on the wealth that he possesses, his 'regularly recurrent receipts', and his casual receipts. Each of these three elements makes a distinct and separate contribution to a person's spending power.

To take the first: the possession of wealth *per se* endows an individual with taxable capacity which is not touched by the income-tax. The second element consists of receipts which are ordinarily included in the concept of taxable income. The third element is represented by receipts like capital gains and gifts which are usually excluded from income taxation. Kaldor concludes that the net result of the exemption of many kinds of receipts from the definition of taxable income and of the neglect of the taxable capacity arising from the possession of wealth is to introduce a systematic bias in taxation in favour of property owners, since the liability of occurrence of such casual or windfall gains is closely associated with the ownership of property.

Kaldor argues that the expenditure tax has other merits. It does not discriminate against risk-bearing as does the income-tax. It encourages savings and discourages dissavings by the wealthy. Any economy based predominantly on private enterprise cannot afford to reduce the flow of private saving, which is precisely what would be done by a comprehensive type of income-tax. Hence the expenditure tax is preferable on economic grounds too.

Raja Chelliah has very rightly criticised the application of Kaldor's expenditure tax to Indian conditions on the following grounds:

- i) First of all, the very complexity of administering the expenditure tax—admitted by Kaldor himself—seems to disqualify the tax for adopting by India at the present juncture when there is a grave shortage of trained revenue staff. Currently, income-tax collections are in great arrears. The income-tax department is ill-equipped even to administer the income-tax efficiently enough to prevent large-scale evasion.
- ii) Secondly, the expenditure tax grants favourable treatment to all savings irrespective of the form in which the savings are held. It might be true that in an advanced country like Britain, a large part of savings would flow automatically into productive investment but in a country such as India relatively unproductive investment claims a substantial share of total savings.
- iii) Thirdly, the tax, both as recommended by Kaldor and as introduced by the Government, will affect only a relatively few individuals. Under the present provisions, only persons with a pre-tax income of Rs. 60,000 will be liable to pay the expenditure tax. The number of assesseees for 1958-59 is estimated to be 6,000.
- iv) Kaldor's objection to the usual type of income-tax is that it is not based on a true measure of the spending power of the individual. It is obvious that the same sort of criticism can be made of the expenditure tax. It is based not on spending power possessed, but on spending power actually exercised.

Kaldor could have made out a slightly more convincing case for an expenditure tax in order to encourage savings if he recommended the replacement of the entire structure of taxes on income and capital by an expenditure tax. There is some merit in Kaldor's argument that if income and property are taxed too severely, while expenditure out of accumulated wealth is not taxed or restricted, the effect will merely be to encourage the capitalists to dissipate their wealth than to reduce their living standards. He holds that the wealthy classes in Britain have ceased to save and that they dissave on a considerable scale—at least in relation to their taxed incomes. The remedy obviously is to reduce the level of taxes on income and capital instead of replacing them by an expenditure tax.

Having so far discussed the effects of taxation on production as a whole, attention should now be given to the effects of taxation on the pattern of production, that is, its composition and location.

Although it has been argued that it is not desirable in the interest of the public to divert economic resources from the channels dictated by the profit motive, it is now accepted that this rule is subject to certain exceptions. The presumption of favouring taxes which cause a minimum diversion, however, still continues. People generally seek to escape taxes by diverting their resources to uses in which they are not taxed or taxed lightly (such as agriculture and limited investments in Pakistan). Taxes which are defended because they cause little or no diversion of resources include those on windfalls, value of land and monopolies. A tax on all incomes should be a non-differential tax (one which gives no inducement to diversion because such diversion would not be a source of profit), but it is argued otherwise, since it taxes both income when saved and income obtained subsequently from savings and therefore differentiates against saving and encourages expenditure.

If the latter argument is accepted then a perfectly neutral tax would be a tax on expenditure only. Taxes on particular commodities have a tendency to cause a diversion of resources from the industries concerned. The extent of the diversion, it is generally argued, would depend on the relative elasticities of supply and demand. The more inelastic the demand or supply is, the less is likely to be the diversion caused by the change of tax. Tariffs which caused a diversion effect on a large scale some years ago have given place, as an instrument of diversion, to a combination of physical controls and financial subsidies.

Diversion of resources could well be a welcome effect of some taxes such as a tax on harmful drugs and alcohol and a betting tax, which reduces the consumption of undesirable goods and services, or taxes on production and consumption which favour export and investment rather than domestic consumption.

The concept of diversion of resources is not restricted to various kinds of productive (or unproductive) activity; there can also be a diversion of resources from one locality to another which enjoys better tax facilities.

To sum up, as taxation increases a point is reached beyond which it checks production. This check is exercised through the effects of taxation on the ability to work, save and invest; through its effects on the desire to work, save and invest; and, lastly, through the diversion of economic resources as between different uses and locations.

## EFFECTS ON DISTRIBUTION

It was the German economist Wagner who advocated the use of taxation to check inequalities of income and wealth. His socio-political view of public finance is still disputed, but it is generally agreed that one system of taxation is preferable to another if it has a stronger tendency to check inequality.

A progressive tax increases the inequality of incomes as does proportional taxation. A system of progressive taxation tends to reduce inequality, and the sharper the progression the stronger the tendency to reduce inequality.

Outlay taxes on commodities of mass consumption are regressive, as people with higher incomes spend only a small proportion of their incomes on any one such item. Taxes on food, tobacco, matches and kerosene oil are illustrations of this kind of tax. Outlay taxes can be made progressive by imposing higher rates of taxation on the comforts and luxuries that are consumed by the upper income groups. *Ad valorem* taxes are generally less regressive than specific taxes because the former are related to values and can be levied at progressive rates in accordance with their values. The progressive nature of outlay taxes varies from one person to another in the same class, and expenditure on particular commodities being optional the progressive nature of commodity taxes is not as meaningful as the progressive nature of taxes on income and capital, which cannot be legally avoided. A tax system can be progressive while including some regressive taxes; in this case the overall effect of the elements of progressive taxation will be far more powerful than that of the regressive elements.

It is possible to ensure a reasonably equitable distribution of the burden of taxation by imposing progressive taxes on income and capital and on the goods and services which can be classified and on the goods and services which can be classified as comforts and luxuries (whether produced domestically or imported), and if so required by pressing revenue considerations by imposing outlay taxes on goods and services of mass consumption with the exception of food goods.

## FUNCTIONAL FINANCE AND COUNTER-CYCLICAL TAXATION

There is sometimes a conflict between the revenue raising function of taxation and that of regulating the flow of national income. A small group of economists, led by Mr. A.P. Lerner, carries this conflict in objectives to the extreme point where revenue considerations are ignored completely. They insist that public finance must be "functional finance", in which every other consideration must give way to that of maintaining an adequate level of national income. On the side of taxation, functional finance takes the following position:

"The effects that the government should consider are primarily the effects on the public, in whose interest the government is supposed to be acting. The effects on the government are always relatively unimportant.

For example, two effects of any tax payment are that the tax-payer has less money and that the government has more money. The first of these effects is important, so that the tax should be imposed if there is a good reason for wanting the tax-payer to have less money. The effect upon the government, namely, that the government will have more money is not important because the government can always get more money quite easily without impoverishing any tax-payers.

From this it follows that taxes should never be imposed simply because the government needs money. Economic transactions should be taxed only when it is thought desirable to dis-

courage these transactions. Individuals should be taxed only to the extent that it is desired to make the tax-payer poorer."

This extreme view assumes that public debt is burdenless, or at least that the burden of debt at a level of full employment will always be so light as to make it inconsequential in relation to tax burdens. At the same time, this view appears to postulate so little vigour in the private sector as to imply that full employment can seldom be attained against the barrier of a constant, reasonable level of taxation. This view can hardly be justified.

Taxes do affect the levels of consumption and investment and thus the level of income. From the point of view of intent, the traditional view of taxation as an instrument solely for raising governmental revenue, and "functional taxation" as an instrument for taking purchasing power away from individuals, are far apart. But taxation for revenue purposes generally results in reduction of private consumption and/or investment, and thus has "functional" results sometimes good and sometimes bad. And functional taxation produces revenue, sometimes "adequate", sometimes more than "adequate" and sometimes less than "adequate" from the traditional point of view. Though fundamental intent of the two approaches is quite distinct, the results may be and frequently are in harmony.

Counter-cyclical taxation and counter-cyclical spending are integral parts of a single programme. The objective is to increase or decrease total private and public spending. While spending policy substitutes public for deficient private spending, in that phase of the cycle, tax reductions are intended to encourage increased private spending. As the cycle moves into boom conditions a minimum of public spending and a maximum of taxation to curb private spending are indicated to defend the economy against price inflation.

The overall purpose of counter-cyclical taxation is to encourage private consumption and/or investment when the national income is below the full employment level, and to brake consumption and/or investment when full employment has been reached and further spending can only result in inflation. With this in mind the required qualifications of a tax system capable of effective counter-cyclical use would be:

- i) The incidence of a particular tax must be dependably known.
- ii) The tax must be applied to a base which is or closely approaches the income stream to be favourably or adversely affected, or to the transaction or activity which it is desired to encourage or discourage.
- iii) The tax must lend itself to timing of the impact so as to gain the desired effect.
- iv) The tax (or the system of taxes) should be structurally capable of simple adjustment, both in rate and base.

The section of the effects of taxation on production can be summed up by reiterating some major themes of practical interest:

There is common agreement that our common objective is high and progressively higher standards of living and, as a means to this end, maximum opportunity to work and to engage in productive enterprise. The need for a high national income is apparent also in our public finances.

Plans involving discriminatory rates of taxation or special concessions to special classes of income would lead us where all efforts at special dispensations lead to administrative complexities and political corruption.

Taxation does influence production. By its effects on the motives that lead individuals or groups into production, it may become a rein or a spur. The effects may be positive if—in the face of new taxation—tax-payers exert more initiative, energy and inventiveness in order to maintain standards. Taxation, mya, however, by design or inaptitude, discourage initiative. Few propositions in public finance have more often been cited than the one which tells us that "the power to tax is the power to destroy." By its relative weight on one form of economic activity as compared with another, taxation may influence the choice of alternatives. If our objective is a dynamic and an expanding economy, our tax system should not discourage new ventures and the taking of risks.

Giving particular attention to the impact of taxation upon production and employment does not mean neglecting other objectives of taxation, such as fairness or equity, or the adequacy of revenue yield. A sensible tax programme must be based on a balance of all these

considerations. Fairness, or equity, in taxation calls for reasonable classification and like treatment of those in like circumstances. Beyond this, the term is associated with the concept of ability to pay or with a frank interest in reducing inequalities in the distribution of income or wealth. It cannot be denied that the desire for "equity" will at times conflict with concern for incentives. High surtaxes on personal income are a clear case of this conflict. Where opposing interests clash, compromise becomes necessary. But there are a surprising number of important tax reforms that involve no clash of interests at all and that can be recommended in the name of both equity and incentives. Usually there is no conflict between a tax programme that nurtures production and one that seeks adequate revenues.

The motives that lead men to venture their earnings and their abilities in new undertakings are not easily catalogued. They are a blend of psychological and social, as well as economic, interests. Not all profit is monetary.

Other things being equal, the higher the degree of taxation the more likely it is to affect economic motivation adversely.

The form as well as the degree of taxation is important.

Proper techniques of taxation can likewise reduce its burden and its harmful effects upon the economy.

Fear of losses is often of more concern to the businessman than the hope of a very high positive profit.

The rate of tax on the marginal portion of profits or other income—the top bracket—may be of greater importance than the average effective rate of taxation.

The motivation to risk and initiate is probably more sensitive to attack than the motivation to work and manage. Leisure competes with work, to be sure, but liquid and relatively secure investments compete with more venturesome undertakings more effectively. Of course, the element of gambling is often attractive and the available supply of ventures is usually amazingly large even though the chance for success in a given line of enterprise is slight and the mortality rate high. Probably the average rate of profit in venturesome undertakings need not be high. But there must be some substantial prizes to be won.

Other things being equal, uncertainty and frequent changes in the tax laws are inimical to business activity.

Commitments for business expansion depend on anticipation of the future. Present experience is important mainly as an indication of future prospects. Tax reductions which are definitely expected may be as stimulating as those which are already realized.

Ordinarily, a tax programme will facilitate production if it leaves business decisions as much as possible to business discretion. Tax consequences enter very heavily into many business decisions at the present time. The decisions to operate as a corporation or a partnership, to distribute dividends or reinvest earnings, to finance with stocks or bonds, and so on, are all likely to be greatly influenced by "advice of counsel" as to the tax consequences.

Counter-cyclical taxation measures should be finely tuned to the requirements of the economy. They should be taken in mind and it should be ensured that they are just sufficient for the purpose in mind and no more and no less.

Whether we like it or not the tax system does vitally influence the economy although it does indeed amount to the tail wagging the dog. It should always be remembered that morale is a major factor in economic motivation, and morale is supported by a sense of fairplay and stability in the relations between government and the private sector. Finally the quantity and particularly the composition of governmental expenditure have a bearing on economic activity and the effects of taxation cannot be analysed in isolation from the utilisation aspect of these revenue receipts.

## TAXABLE CAPACITY

The concept of taxable capacity is an ancient one and far-sighted rulers never attempted to raise revenues over and above the supposed taxable capacity of their domains. Even as late as 1920 Mr. McKenna, an ex-Chancellor of the Exchequer of the U.K. and Chairman of a bank,

alleged that the taxable capacity of the country was being exceeded on the assumption that no money which is taken in taxation is available for investment in industry. Dalton rather aptly describes taxable capacity as "a common phase, but a dim and confused conception." Sir Drummond Fraser has commented that "the taxable capacity of a nation is surely reached when tax-payers are forced to borrow from the banks to pay their taxes".

Sir Josiah Stamp (later Lord Stamp), who is the leading exponent of the concept of taxable capacity, defines it as total production minus the amount required to maintain it at subsistence levels. He argues that taxable capacity depends on the distribution of incomes and will be greater the greater the inequality of income and wealth. Lord Stamp is of the view that the limits to taxable capacity are the check to total production, and the check to the total revenue yield as a result of increasing taxation. Findlay Shirras has, in addition to the factors mentioned by Lord Stamp, argued that the taxable capacity of a country is also determined by the number of inhabitants (the larger the population the greater the taxable capacity), the method of taxation (a scientifically constructed tax system will bring a greater yield), the psychology of tax-payers (a popular government can galvanise larger revenues), and the stability of income (precarious incomes yield less taxation and so do incomes which are crippled by inflation).

If the concept of taxable capacity is total production less total consumption, then taxable capacity has hardly been exceeded anywhere. Dalton has forcefully criticised the concept of taxable capacity:

"How much public expenditure we can 'afford', and hence how much taxation we can advantageously pay, obviously depends upon the character of the public expenditure. Further, the character of the public expenditure being given, we could, perhaps, 'afford' it, if the taxation was raised in one way, but not if it was raised in another. For the effects of tax systems, on production, on distribution and in other directions, vary, and the gain from a given expenditure might be greater than the loss from one tax system, but less than the loss from another which raised the same revenue."

Dalton does concede that the relative taxable capacity of two communities can be measured. It is possible to ascertain how much a particular community or group can be taxed without producing various unpleasant effects, or in what proportion two or more communities should contribute to a common expenditure by way of taxation. It would be more appropriate if taxable capacity was to be referred to as ability to pay. As the common expenditure increases, the share to be paid by the richer contributors should increase. This principle is applicable to the relations between federal and provincial governments as also for distributing the cost of international organisations amongst Member States. When asked how the taxable capacity of a nation is ascertained, Professor Edwin Cannan gave a short but forceful comment: "Nohow". Thus while relative taxable capacity can be better expressed in other terms, the concept of absolute taxable capacity is rather a hazy and dim one and should not find a place in any scientific discussion.

## TAXATION IN PAKISTAN

In Pakistan taxation revenues are low in relation to Gross National Product on account of the under-developed nature of the economy. Central and Provincial taxes and revenues increased from 7.87% of GNP in 1951-52 to 10.13% in 1958-59, 11.2% in 1964-65, 11.88% in 1969-70 and 17.89% in 1973-74 and then fell to 15.86% in 1974-75. Direct taxes account for a relatively small percentage of revenues; while the amount of direct taxes fell from Rs. 1205.9 million in 1973-74 to Rs. 1211.4 million in 1974-75, indirect taxes during these years amounted to Rs. 8,830.8 million and Rs. 9,508.8 million respectively.

The main objective of taxation in Pakistan still continues to be the provision of revenues to defray public expenditure for current purposes and, if possible, to finance a part of the capital and developmental expenditure. Taxation is also used to regulate international trade in order to prevent grave imbalance in the balance of payments situation and to provide protection to local products. An attempt has been made to use taxation in Pakistan for reducing the inequality of distribution of income and wealth, but in this case the only practical impact

appears to be the encouragement of tax evasion on a massive scale and putting a premium on the honesty of those who dread the prospect of facing punishment if they are caught evading taxes; discouraged savings; and frightening prospective investors. This is rather unfortunate but the fact remains that taxes in Pakistan are very progressive even in comparison to developed countries, and the progressive nature of taxation is reflected not only in income-tax, wealth tax and estate duties but also in customs and excise duties where the rates of taxation progressively increase at an accelerated rate. In Pakistan an attempt has also been made, and indeed quite successfully, in the past to use the taxation structure for inducing economic growth. Tax holidays have been generously provided, depreciation allowances are liberal and an attempt is also made to give a growth orientation to import, export and excise duties, although much more can be done in every sphere. The overall structure and level of taxation has always had a pro-agricultural bias, and no wonder that it should be so since political power has always rested by and large with landowners, be it a democratically elected Government of the right, or a benign and development oriented military dictatorship, or a brute and naked military force, or a people's government of the left.

- The largest sector of the economy, that is, agriculture has so far got away with the least amount of direct taxation. But proponents of the agricultural sector proclaim loud and clear that it is subject to extensive indirect charges such as the deliberate attempt to keep down the level of agricultural prices well below international levels, and the high prices which the agriculturists are required to pay for the shoddy and high cost manufactured goods produced within the country, including essential agricultural inputs.

The distribution of financial resources between the Central and Provincial Government has created problems and it is natural that it should have done so in view of the bread and butter aspects of the problem. The Government of India Act, 1935, classified the sources of revenue into three categories:—purely provincial; purely federal; and sources of revenues to be administered by the Central Government, but the receipts to be shared by the Provinces. The third category includes income-tax, central excise and export duties, duties in respect of succession to property other than agricultural land, stamp duties contained in the federal legislative list, and terminal taxes on goods carried by the railways. The broad financial structure indicated in the Government of India Act of 1935 was adopted in Pakistan and it remained in force until the Raisman Award. Sir Jeremy Raisman, while recommending a new collection of revenues between the Centre and the Provinces stated:

“It is impossible to approach the problem of distribution of resources between Centre and Provinces from the angle of providing adequate resources to every Government for discharging its functions in the manner and on the scale which appears to be desirable. In other words each Government will have to cut its coat according to its cloth. The most one can hope to do is to endeavour to achieve the best and most just distribution of the available resources.”

The Raisman Award made the following allocations:

- (i) 50 per cent of the net proceeds of Income tax (other than those pertaining to the Federal Capital and the Federal Emoluments) were to be distributed as follows:—
 

East Pakistan	.. 45%
Punjab	.. 27%
Sind	.. 12%
North-West Frontier Province	.. 8%
Bahawalpur	.. 4%

The remaining 4% was meant for Baluchistan and other States which might accede.
- (ii) Sales tax was to remain centrally administered but the provinces were allowed half of the net receipts collected within their area. Half of the receipts collected in Karachi area were allocated to the various units in West Pakistan as under:—
 

Punjab	.. 54%
Sind	.. 16%
NWFP	.. 10%
Bahawalpur	.. 4%
Baluchistan	.. 2%



Karachi .. 6%  
Tribal areas and other States .. 8%

- (iii) 50% of the net proceeds of the Central Excise Duties on tobacco, betel-nut and tea were divided among the various units in accordance with the percentage recommended for distribution of income-tax receipts.
- (iv) East Pakistan was allocated 62½% of the basic jute duty and 10% of any additional duty.
- (v) The tax subvention for NWFP was raised from Rs. 10 million to Rs. 12.5 million.

The arrangements envisaged in the Raisman Award continued for some 11 years until the 1962 Constitution which provided a larger share of the proceeds of Central taxes and duties to the two Provinces of East and West Pakistan (under the One Unit scheme) in the following manner:

- (i) The provinces were from the 1st July, 1962, given a share of the net proceeds of the following taxes and duties imposed and realised by the Central Government according to the percentages specified against each:—
  - a) Taxes on income including corporation tax but excluding federal emolument .. 50%
  - b) Sales tax .. 60%
  - c) Central Excise duty on tea, betelnut and tobacco .. 60%
  - d) Export duties on jute and cotton .. 100%
  - e) Estate and succession duties in respect of agricultural land .. 100%
  - f) Taxes on the capital value of immovable properties .. 100%
- ii) The sums assigned to the Provinces from the proceeds of the taxes and duties mentioned above were to be distributed between the two Provinces of East and West Pakistan as follows:—
  - a) Sales Tax .. 70% on the basis of population and 30% on the basis of incidence.
  - b) Estate and succession duties in respect of agricultural land and the taxes on the capital value of immovable property. .. Each Province shall receive an amount equal to the collections in that province.
  - c) Other taxes and duties .. On the basis of population, viz. 54% for East Pakistan and 45% for West Pakistan.

The 1973 Constitution (under the People's Government) allocated the following sources of revenues to the Federal Government:

- i) Duties of customs, including export duties.
- ii) Duties of excise, including duties on salt, but not including duties on alcoholic liquors, opium and other narcotics.
- iii) Duties in respect of succession to property.
- iv) Taxes on income other than agricultural income.
- v) Taxes on corporations.
- vi) Taxes on sales and purchases.
- vii) Taxes on the capital value of the assets, not including taxes on capital gains on immovable property.
- viii) Taxes on mineral oil, natural gas and minerals for use in the generation of nuclear energy.
- ix) Taxes and duties on the production capacity of any plant, machinery, undertaking, establishment or installation in lieu of the taxes and duties specified in entries at (ii), (iv), (v) and (vi) or in lieu of any one or more of them.
- x) Terminal taxes on goods or passengers carried by railway, sea or air; taxes on their fares and freights.

- xi) Fees in respect of any of the matters in this Part, but not including fees taken in any court.

Other taxes were allocated to the Provincial and Local Governments. Article 160 of the Constitution further laid down that a National Finance Commission shall make the recommendations to the President for distribution between the Federation and Provinces of the net proceeds of the following taxes:

- i) Taxes on income, including corporation tax, but not including taxes on income consisting of remunerations paid out of the Federal Consolidated Fund;
- ii) taxes on sales and purchases;
- iii) export duties on cotton, and such other export duties as may be specified by the President;
- iv) such duties of excise as may be specified by the President; and
- v) such other taxes as may be specified by the President.

During the four years from 1971-72 to 1975-76 the share of the four provinces was raised from 40% to 80% of the divisible pool. Increases were also made in the subvention paid to the NWFP and Baluchistan. The share of the Provinces in the divisible pool has been fixed according to their population (Punjab 62.5%, Sind 23%, NWFP 11%, and Baluchistan 3.5%). Although the royalty and excise duties on natural gas are collected by the Federal Government, they are distributed amongst the provinces in accordance with the location of the well-head.

During 1974-75 the royalty and excise duty on natural gas amounted to Rs. 551.9 million out of which Baluchistan got 88.7%, Punjab 5.4% and Sind 5.9 per cent; there is no gas well-head in NWFP. The additional revenues made available to the provinces in recent years were designed to promote national integrity and progress, but it is rather doubtful if they succeeded in achieving this objective. In any case the Provinces are now better off and they should get substantial relief with the writing off of all debts outstanding against them.

The importance of revenue-sharing with the Provinces would be apparent from Table 20.2.

TABLE 20.2

*Revenue Sharing with Provinces*

Province	% share	(Million Rupees)	
		1973-74	1974-75 Budget
Punjab	.. 56.5	488.40	708.80
Sind	.. 23.5	207.30	394.80
NWFP	.. 15.5	136.70	194.50
Baluchistan	.. 4.5	39.70	56.50

In Pakistan income-tax on personal and corporate incomes, estate duties, wealth tax, sales tax, Central excise and customs duties are administered by the Federal Government.

The provincially administered taxes are land revenue, water rates, betterment taxes, provincial excise, motor vehicles tax, stamp duty, court fees, entertainment tax, betting tax, and Urban Immovable Property Tax.

The local taxes are confined to Octroi Duty, property tax, tax on vehicles, professional tax, conservancy taxes, animal tax and poll tax.

The principal centrally administered taxes and their share of Central revenues is reflected during the past 25 years in Table 20.3.

TABLE 20.3

*Principal Centrally Administered Taxes and their share of Central Revenue*

(Million Rupees)

Year	Custom duties		Central Excise		Income-tax and Corporation tax		Sales Tax	
	Amount	%	Amount	%	Amount	%	Amount	%
1950-51	819.3	64.3	67.2	5.3	211.4	16.6	146.8	11.5
1954-55	455.8	38.8	130.0	11.0	239.5	20.4	187.0	15.9
1958-59	545.3	27.8	321.5	16.4	492.1	25.1	333.9	17.0
1964-65	1,078.3	32.6	816.2	24.7	668.9	20.3	705.7	21.4
1969-70	1,795.0	26.7	2,473.0	36.7	1,045.4	15.5	714.1	10.6
1972-73	2,611.5	34.6	2,330.0	30.9	1,128.7	14.9	474.5	6.2
1973-74	3,907.0	36.7	2,759.9	26.0	1,134.5	10.6	662.5	6.2
1974-75	5,091.4	42.1	3,004.7	24.8	1,055.2	8.7	697.2	5.7

Source: Ministry of Finance and Economic Surveys.

Customs duties continue to be the mainstay of Centrally administered revenues although their share fell from 64.3 per cent in 1950-51 to 26.7 per cent in 1969-70, although it has again increased to 42.1 per cent in 1974-75. Central excise duties reflect the growth of industrial production and their share of total revenues increased from 5.3 per cent in 1950-51 to 36.7 per cent in 1969-70; during 1974-75 they accounted for 24.8 per cent of Central revenues, depicting stagnation in industrial production. The share of income-tax and corporate tax in central revenues has not increased substantially and actually fell to 8.7 per cent in 1974-75 as against 15.5 per cent in 1969-70 and 16.6 per cent in 1950-51. The raising of the exemption level for income-tax assessment to Rs. 12,000 per annum would be largely responsible for this; in addition there is no doubt that steeply progressive rates of taxation encouraged evasion. The contribution of sales tax to Central revenues has also declined from 11.5 per cent in 1951, 17% in 1968-69, 10.6 per cent in 1969-70 to 5.7 per cent in 1974-75.

Let us now turn to a more detailed examination of the Centrally administered taxes.

## CUSTOMS DUTIES

Goods imported into Pakistan are subjected to various rates of Customs duty, either *ad valorem* or specific, as prescribed in the Pakistan Customs Tariff. The general scheme followed in respect of imports is that luxury or non-essential goods are subject to higher tariff rates, and essential articles and imports of a developmental nature to lower rate of duty. The import tariff has progressively been given an industrial bias by keeping the duties on raw materials and other industrial requirements lower than those on semi-finished and manufactured items.

At the time of devaluation in May, 1972, the import duties were reviewed and adjustments made in the rates, keeping in view the changed import values of goods. Regulatory duties at specified rates were also levied on a number of items. In making these tariff adjustments the primary objective was to keep the landed cost of goods in the pre and post-devaluation periods at par.

For the first time in the 1971-72 Budget, an export duty at 20 paise per pound was levied on cotton yarn of 21-24 counts with the ostensible object of discouraging undervaluation by exporters. With the devaluation of the Pakistan rupee on the 11th May, 1972, the position of export duties radically changed and under the Finance (Supplementary) Ordinance, 1972, export duties were imposed on raw cotton and cotton waste, oil cakes, rice, raw hides and skins, raw wool, cotton yarn of all counts, grey cloth and semi-tanned and tanned hides and skins.

Due to the liberalization of the import policy, the import of a number of items hitherto banned was allowed under the free list or unified list in 1973. However, adequate upward adjustment in import duties was made so that the local industries did not suffer adversely but at the same time making it imperative for such industries to improve their performance so as to be able to face healthy competition from imported products.

The damage caused by the floods of August, 1973, necessitated the raising of further resources for undertaking reconstruction work. On the 15th September, 1973, an Ordinance was issued by virtue of which all imported articles except machinery, tractors, parts and accessories, betel leaves, betel nuts and spices were subjected to a Flood Relief Surcharge at 25% of the rates of duties then existing. The exemption extended to imported parts of tractors and accessories was withdrawn and a concessionary duty of 10% imposed. Besides, upward adjustment in duty was made on betel leaves, betel nuts and spices.

An approximation of the average rates of import duty in Pakistan classified by end-uses has been indicated in Table 19.11 of the previous Chapter.

The total import duty in 1974-75 is estimated at Rs. 2,600 million and it is largely raised on mineral fuel oil and products thereof; chemicals and chemical products; yarn and fabrics of man-made fibre, iron and steel and manufactures thereof; vehicles, machinery; railway plant and rolling stock; dyes, colours, paints and varnishes; rubber and articles thereof; woodpulp paper and stationery and flood relief surcharge.

Export duties during 1974-75 are estimated at Rs. 3,377.6 million and they were mainly collected from exports of cotton raw; cotton waste of all sorts; rice; cotton yarn; grey cloth; semi-tanned hides and skins and finished cotton cloth, all sorts.

As on June 30, 1976, the export tariff was substantially revised and reduced as under:—

<i>Name of Article</i>	<i>Rate of duty</i>
Raw cotton (staple)	25% <i>ad val.</i>
Rice, husked or unhusked including rice flour but excluding rice bran and rice dust.	
a) Basmati rice	Rs. 34 per cwt.
b) Other rice	30% <i>ad val.</i>
Hides, raw	40% <i>ad val.</i>
Calf and lamb skins raw	15% <i>ad val.</i>
Cotton seed	10% <i>ad val.</i>
Cement	Rs. 10 per ton.
Semi-tanned and tanned hides and skins other than finished leather	20% <i>ad val.</i>
Oilcakes	45% <i>ad val.</i>
Molasses	30% <i>ad val.</i>

Pakistan has a vast open border with India, Iran and Afghanistan. There is also a very long coastline along Makran. The Customs Department which is primarily concerned with revenue realisation is ill-equipped to check smuggling on open borders. The civil armed forces operating in these areas were, therefore, delegated the powers of Customs Officers to deal with smuggling. In addition the Police, West Pakistan Rangers, Coast Guards, Frontier Constabulary, and the Directorate of Complaints (Investigation) were also delegated with the powers of Customs Officers. The presence of para-military forces on the Borders has had some effect in curbing smuggling and during the period 1973-74, the Customs Department seized smuggled goods worth about Rs. 22.6 million in 686 cases. Despite all this, smuggling continues to thrive with the support of influential people. The extent of under-invoicing and over-invoicing has been considerably checked and is no longer a serious menace.

## EXCISE DUTY

In recent years, excise duties have emerged as one of the important revenue-yielding sources for the Federal Government. These duties are levied selectively on indigenously manufactured goods and services. The goods selected for levy of excise duty are supposed to be: (i) those produced by industries which have attained reasonable stability, (ii) goods enjoying appreciable consumer or tariff preferences against import, and (iii) goods which have a steady market. While levying excise duties on goods and services, Government's declared policy is to consider factors such as simplicity of rates of duty, elasticity of demand, dispersion of incidence and its co-relation with the income levels so that the levy is easy to collect and administer and the incidence of duty on lower income groups is minimal. At present there are 64 items, including two services, which are subject to excise duty. The excise tariff carriers specific as well as *ad valorem* rates of duty.

In order to simplify procedures and to reduce the contact of assessee with the departmental officers and to encourage greater participation of the assessee in the assessment of taxes due from him, a system of self-assessment and self-clearance of goods was introduced and has been functioning for the past several years in respect of certain commodities at principal industrial centres. This has also helped in doing away with the intervention of excise staff at the time of clearance of goods.

In line with the aforesaid policy of Government and with a view to providing tax inducement for optimum utilization of available industrial resources of the country, the excise duty on five items (namely, cement, sugar, soda ash, vegetable oil, products, cotton fabrics and cotton yarn), was shifted in 1968 from levy on actual production to a fixed annual charge on the basis of the production capacity of each factory producing these commodities. In respect of cement and vegetable oil products, duty on the basis of production capacity, however, was imposed even earlier, but in real effect the capacity system of tax realization came into its own when the cotton fabrics and yarn industry, which is the major industry in the country, was brought under this system. Vegetable oil products was reverted in 1971 to the original system of duty on actual production, while cotton fabrics and cotton yarn factories established after the 31st December, 1955, have been allowed to either remain under the production capacity system or to opt out for payment of duty on actual production.

A system of relating excise duty to the printed retail price in respect of some excisable goods was introduced in 1966 in the case of cigarettes and subsequently extended in 1969-70 and in later years to other items, namely, tea, soap, cosmetics, knitting wool, electric bulbs, fluorescent tubes, dry cells, storage batteries, lubricating oils, creams and polishes, woollen yarn, woollen blankets, lohis and shawls. This was done to encourage consumer resistance to price hikes and for holding the price line of certain essential consumer goods.

Excise duty is levied either on the basis of value, or retail price or at specific rates and there are three main procedures for its collection:

- i) *Basic Procedure*—Under this procedure a manufacturer wanting to remove his excisable goods from the factory applies to the proper officer, who after assessing and realising duty through treasury deposit or by adjustment in a current account, allows the clearance of goods in his presence.
- ii) *Self-clearance*—Under this system goods are removed from the factory by the management itself without excise supervision. For payment of duty, the management prepares the relevant excise documents before removing the goods and pays excise duty by adjustment in the current account opened by him for this purpose with the Excise authorities.
- iii) *Capacity System*—Under this capacity system, duties are paid on the basis of annual production capacity of plant and machinery which is fixed by the Central Board of Revenue and the amount is collected in 12 equal monthly instalments. At present units manufacturing cotton yarn, cotton cloth and sugar are subject to this system. Cotton textile units equipped with five to twenty power looms and factories manufacturing fabrics of man-made fibres (art silk cloth), have the option to pay duty either at

fixed per loom rates in monthly instalments or on the basis of quantities of cloth produced.

There are quite a few cases of evasion of excise duty. Excise duty is generally evaded by one or more of the following methods:—

- a) production and sale of excisable goods without obtaining Central Excise licence and payment of duty;
- b) clandestine removal of goods from licensed units without payment of duty;
- c) under-declaration of value or retail price in the case of goods on which duty is levied on the basis of value or retail price;
- d) mis-declaration of quality or category of goods to avail of assessment at a lower rate, such as mis-declaration of counts of yarn and fabrics;
- e) maintenance of incorrect accounts;
- and f) and misuse of exemptions.

In order to combat evasion of duty the Excise Department carries out surveys to unearth hidden units manufacturing excisable goods, makes surprise checks and conducts patrolling to check clandestine removal of goods without payment of duty. Market prices of excisable goods are kept under review so as to verify whether the value or prices of the purposes of duty have been correctly declared. Similarly samples are drawn to determine through laboratory tests the count of cotton yarn cloth to eliminate chances of manipulation of counts.

The position of contravention and concealment cases detected in the last three years and penalties imposed is as follows:—

Year	Contravention cases detected (Nos.)	Penalties imposed (000 rupees)
1971-72	1485	3,303
1972-73	1624	1,224
1973-74	1487	25,000

The five production capacity items provided 850.2 million rupees in 1974-75 out of a total estimated collection of 3,082.2 million rupees by way of excise duty. The POL Groups provided Rs. 817.8 million while other items included (Matches, vegetable oil products, tobacco, tea, fabrics, tyres and tubes, soap, salt, beverages, electric bulbs, polishes, cosmetics, electric fans, rubber and rubber products, electric batteries, paper and paper board, tanned leather and services in hotels, etc.), provided Rs. 1,114.2 million. Rates of excise duty in Pakistan vary from 5 to 10 per cent to figures which can even exceed 100 per cent.

## INCOME-TAX

The main characteristics of assessment and payment of income-tax in Pakistan are as follows:

- i) Income from whatever source derived is liable to income-tax unless it is otherwise exempt. The main exemptions are agricultural income and casual income. Tax is not chargeable on total income upto Rs. 12,000.
- ii) Income-tax is charged for each financial year beginning on the 1st July, called the assessment year, in respect of the income earned during the year (called the previous year) ending at any time between the 1st July, and the 30th June of the year immediately prior to the commencement of the assessment year. The tax-payer is authorised to adopt either the financial year or any other previous year or different previous year for his different sources of income. In the case of salaries the financial year is generally adopted as the previous year.
- iii) Income is taxed with reference to the residential status of a tax-payer. A person who is ordinarily resident in Pakistan is taxed on his total world income. A person

who is resident but not ordinarily resident is generally taxed on his income in Pakistan at rates applicable to such income. A non-resident is taxed on his income in Pakistan at the maximum rate which is 30 per cent or at the applicable rates whichever be the higher. However, at his option, to be given by the 30th of September, in the year of assessment, a non-resident can choose to be taxed at rates applicable to his total world income.

A company is resident in Pakistan if it is registered under the Companies Act, 1913, or formed under a Federal Act, having in each case its registered office in Pakistan; or the control and management of its affairs, is situated wholly in Pakistan in that year. A company is resident and ordinarily resident if it is resident in Pakistan.

- iv) Every person whose total income during the previous year exceeded the maximum amount which is not chargeable to tax and every person, who was assessed to tax for any of the 5 years preceding that year, is required to furnish his return of income.
- v) Income, profits and gains liable to income-tax are classified under the following heads:—
  - a) Salaries.
  - b) Interest on Securities.
  - c) Income from property.
  - d) Profits and Gains of Business, Profession and Vocation.
  - e) Capital gains.
  - f) Other sources.(excluding income exempted under this Act)
- vi) Income from interest receivable by a person from any security of the Federal or Provincial Government or a debenture or other security issued by a local authority or a company is taxed under this head. Expenses, such as interest paid on money borrowed for purchasing securities, are deductible from interest income. For any tax deducted at source the recipient gets credit at the time of assessment. Interest on government securities together with interest on Bonds of taken-over industries is exempt up to Rs. 5,000.
- vii) The annual letting value of a property constitutes the gross income from property. The annual letting value of a property is the rent which the property might reasonably be expected to fetch from year to year if it were let out to a tenant. In computing income from property, a deduction of one-sixth of the annual value is allowed for repairs. The actual expenditure, if any, on insurance premia, mortgage interest and interest on loan taken in connection with the property, ground rent, land revenue, local taxes, and collection charges upto 6 per cent of the annual value are also deductible in computing income under this head.

Income from residential houses constructed during 1965—70 was exempt from tax if annual letting value did not exceed Rs. 6,000 per annum. Income from houses constructed between 1st July, 1974 and 30th June, 1980 whose annual rental value does not exceed Rs. 12,000 will be exempt for a period of five years. Where the rental value of a house constructed during that period exceeds Rs. 12,000, tax will not be leviable on the first Rs. 6,000. Income from housing estates constructed during that period, where the rental of each flat/tenement does not exceed Rs. 300 per month, will also be exempt for the like period.

Where the property is in the occupation of the owner for his own residence, no addition on account of income from such property is made if its annual value does not exceed Rs. 6,000. Where the annual value is higher, the first Rs. 6,000 is deducted and the balance, or a sum equal to 10 per cent of the total income of the owner, whichever is the lower, is deemed to be the annual value of such property for purposes of inclusion in his total income.

In the case of property jointly held in definite and ascertainable shares by two or more persons each co-sharer is taxed in respect of his share in the income from that property.

- viii) Loss in any year is allowed to be set off against income from any other source of that year and where it cannot completely be so absorbed, it can be carried forward for six years to be set off against future profits from the same business, profession or vocation. Loss from speculative transactions can, however, be set off only against profits from such transactions. The six years time limit does not apply to loss on account of unabsorbed depreciation allowance, which can be carried forward indefinitely till it is completely set off against profits.
- ix) Income from other sources: Income which is liable to tax from any source other than the sources indicated above is included under this head. Thus, generally speaking, income from dividends, interest on bank deposits, royalties, director's fees, commission, remuneration received by a person who is not an employee, renting out of machinery etc., would fall under this head. From the gross income received by a tax payer, interest paid on borrowed capital and all admissible expenditure, other than personal expenses, incurred for the purposes of earning such income is deducted before subjecting it to tax.
- x) Dividends received on NIT (Units) of ICP Mutual Funds Certificates are exempt upto Rs. 10,000. As for dividends from other companies, the exemption limit is Rs. 5,000.
- xi) Capital Gains arise from the sale, exchange or transfer of a capital asset. For this purpose, stocks and shares are taken as capital assets. The capital gains arising from the sale/transfer of immovable property are exempt from Federal Taxes but are liable to capital gains tax by the Provincial Governments.

In determining the amount of capital gains, the actual cost of the capital asset to an assessee has to be deducted from the sale price. In the absence of actual cost, the fair market value at the relevant time can be substituted.

However, by virtue of the Finance Act, 1976, capital gains will not be liable to tax for two years, i.e., during the period of assessment beginning on July 1, 1975, and ending on June 30, 1977. But all the same, capital losses during this period will be carried forward to be set off against future capital gains.

- xii) Tax is not payable:
  - a) On a sum of Rs. 2,500 which is admissible as Personal allowance to all assesseees other than companies; in the case of salaried persons, the Personal allowance is Rs. 5,000 and in the case of professionals Rs. 3,000.
  - b) In the case of salaried persons in respect of earned income relief on 30% of income from salary subject to a maximum of Rs. 7,500. In the case of business or profession, or vocation on 20% of such income subject to a maximum of Rs. 5,000. In other cases 15% of total income subject to a maximum of Rs. 3,500.
  - c) On any sum paid by an assessee as premium for insurance on his/her own life or the life of his/her spouse upto 10% of the actual capital sum assured.
  - d) On any sum paid as contribution to any Recognised Provident Fund.
  - e) On any investment made in the purchase of Post Office Saving Certificates, NIT (Units) subject to certain restrictions and of such government securities as are specified by the Central Board of Revenue.
  - f) On any investment made in the purchase of shares of such Public Limited Companies as are approved by the Central Board of Revenue and on debentures issued by the Companies with the approval of the Controller of Capital Issues.
  - g) On any amount spent on the purchase of books of professional or technical nature or of general utility.
  - h) On an amount paid as a donation to any educational institution run by Government; and hospital aided/run by Government, any flood/famine relief fund sponsored by Government and any other institution or fund approved under section 15D of the Income-tax Act, provided the aggregate



of such donation does not exceed 10 per cent of the total income of an assessee or one lac rupees whichever is the less.

Exemptions serialised at (c) to (g) are subject to the overall limit of 30 per cent of the total income of the tax-payer or Rs. 30,000 whichever is less.

- xiii) Tax credit will be allowed to companies making initial investments in equities of new industrial undertaking at:
- 30 per cent of such investment if the industry is set up in Baluchistan, Tribal Areas, Northern Areas and Azad Kashmir;
  - 15 per cent of such investment if the industry is set up elsewhere in Pakistan except Talukas of Karachi and Hyderabad and Tehsils of Lyallpur and Lahore and such adjoining areas of Tehsil Lahore as may be notified by the Federal Government.

**xiv) Rates:**

The rates of Income-tax and Super-tax are liable to change every year. Rates of tax 1976-77 are as follows:—

(a) For individuals the Income-tax rates are:—

- |   |  |
|---|--|
| (i) Where the taxable income does not exceed Rs. 5,000.                           | 10%  |
| (ii) Where the taxable income exceeds Rs. 5,000 but does not exceed Rs. 10,000.   | Rs. 500 + 20% of the amount exceeding Rs. 5,000.     |
| (iii) Where the taxable income exceeds Rs. 10,000 but does not exceed Rs. 20,000. | Rs. 1,500 + 30% of the amount exceeding Rs. 10,000.  |
| (iv) Where the taxable income exceeds Rs. 20,000 but does not exceed Rs. 30,000.  | Rs. 4,500 + 40% of the amount exceeding Rs. 20,000.  |
| (v) Where the taxable income exceeds Rs. 30,000 but does not exceed Rs. 70,000.   | Rs. 8,500 + 50% of the amount exceeding Rs. 30,000.  |
| (vi) Where the taxable income exceeds Rs. 70,000.                                 | Rs. 28,500 + 60% of the amount exceeding Rs. 70,000. |

(b) Firms registered for tax purposes are liable to Super-tax at the following rates:

Rupee tax is charged at 35% from banking companies and at 30% from others. Several rebates have been allowed; 5% if the company is a public limited one; or if its paid-up capital and free reserves are less than one million rupees for industrial undertakings and half a million rupees for others, or if it is an industrial undertaking with fixed assets other than land of less than 3 million rupees and it has commenced production between July 1975 and June 1980; 10% for companies engaged in agro-based industry; and 15% for companies importing their capital from abroad.

**Export Rebates:** Where the total income of an assessee, not being a Company, includes any profit and gains derived from export of goods out of Pakistan, income-tax and super-tax, if any, payable by him in respect of such profits and gains, shall be reduced by an amount computed in the manner specified hereunder:—

- Where the goods exported abroad had not been manufactured by the assessee who re-exported them: 15 per cent of the income-tax and super-tax, if any, attributable to export sales.

(a) and where the export sales Plus an additional 1 per cent for every

during the relevant year exceeds the export sales of the preceding year.

- (b) and where the export sales during the relevant year do not exceed the export sales of the preceding year.

- (ii) Where the goods exported had been manufactured by the assessee who had exported them.

- (a) Where the export sales do not exceed 10 per cent of the total sales.  
 (b) Where the export sales exceed 10 per cent but do not exceed 20 per cent of the total sales.  
 (c) Where the export sales exceed 20 per cent but does not exceed 30 per cent of the total sales.  
 (d) Where the export sales exceed 30 per cent of the total sales.

increase of 10 per cent in export sales over those of the preceding year, subject to an overall maximum of 25 per cent.

Minus 1 per cent for every decrease of 10 per cent in export sales over those of the preceding year, subject to an overall minimum of 10 per cent.

NIL.

15 per cent of the income-tax and super-tax, if any, attributable to export sales.

20 per cent of the income-tax and super-tax, if any, attributable to export sales.

25 per cent of the income-tax and super-tax, if any, attributable to export sales.

Provided that in the case of a registered firm, super-tax payable by it shall be reduced under the above plan by an amount calculated on the basis of the income-tax payable on its total income had it been the total income of an unregistered firm. The above rebate scheme does not apply in respect of the following goods or class of goods, namely:—

- (a) raw cotton;  
 (b) such other goods, as may be notified by the Central Board of Revenue from time to time.

## TAX EVASION

One of the important problems faced by any tax administration is the checking of tax evasion. Tax evasion is sometimes taken to be synonymous with avoidance of tax. Whereas the former is downright defrauding of revenue through such illegal acts as non-reporting of taxable income or deliberate suppression of some sources of income, the latter is a legal means by which a person, acting within the letter of the law, reduces his due tax liability.

In Pakistan some of the methods employed by the assesseees in evading taxes are as under:—

- i) Suppression of sales and inflation of purchases.
- ii) Maintenance of duplicate sets of accounts.
- iii) Under-valuation of stocks and other assets.
- iv) Concealment of branch profits and other subsidiary sources of income.
- v) Conducting business with fictitious partners.
- vi) Frequent changes of names of business.
- vii) Benami transactions.
- viii) Diversion of profits through fictitious credits in the books of accounts.
- ix) Non-production of accounts when profits are high.
- x) Over-statement of salaries of employees, expenses of establishment, etc.
- xi) Wrong and inflated claims of depreciation and fake leases of factories.
- xii) Debiting expenses relating to tax holiday units to the accounts of taxable units.
- xiii) Purchases of prize bonds from concealed income. The prize money being tax-free, could be safely introduced in business.

The Government has now taken steps to fight some of them which are:—

- i) a full-fledged Commissioner's charge was created in 1961 to deal specifically with big cases of suspected tax evasion. The Investigation Department detected concealment of income of Rs. 15.8 million during 1972-73 and Rs. 89.5 million during 1973-74. It launched 39 prosecution cases during 1972-73 and 85 during 1973-74.
- ii) In 1972 a survey organisation was established in each territorial zone. Emphasis was placed on both internal and external surveys. An Inspecting Assistant Commissioner of Income-Tax (Survey) with two Income-Tax Officers and a number of Inspectors was appointed to deal exclusively with the survey work. The survey organization has discovered a substantial number of new cases both in the cities and in the developing towns. The performance figures of the survey organisation during the first three years are as under:—

Year	No. of new cases discovered
1971-72	28,115
1972-73	40,099
1973-74	27,714
	<hr/> 95,928 <hr/>

- iii) An intelligence branch was created in every Commissioner's zone.
- iv) Rules were framed providing for rewards to informers, both official and non-officials, who provide information leading to detection of tax evasion. This might well create a class of professional informers and lead to a further deterioration of values.
- v) Action was taken to ensure that prosecutions were filed in as many cases as possible.
- vi) Law Officers were appointed at Lahore and Karachi for advising the Commissioners on prosecution cases.
- vii) Special Judges were appointed for hearing the prosecution cases.
- viii) One Deputy Director of Inspection (Taxes) was appointed to scrutinise and examine all special cases of tax evasion.
- ix) Provision in the law was made whereby the Central Board of Revenue could publish the names of the persons who resorted to tax evasion and were prosecuted and sentenced for such offence.

## CORPORATE TAX

Corporate Tax is levied on all limited liabilities companies, whether public or private, and is charged at 30% of net income, irrespective of the amount of income. In addition there is a super-tax of 30 per cent which is levied irrespective of the amount of income.

## SALES TAX

Sales tax is payable:

- i) on the sale price of all goods produced or manufactured in Pakistan;
- ii) on the duty-paid value of all goods imported into Pakistan;
- iii) on the purchase price of all Pakistani goods and duty-paid value of all imported goods sold by a licensed wholesaler;
- iv) on the duty-paid value of such export goods or class of goods as the Central Board of Revenue may notify; and
- v) on such goods and class of goods purchased without payment of Sales Tax by a licensed exporter as are not exported out of Pakistan.

Sales tax is not payable on the following transactions:—

- i) goods imported by a licensed wholesaler;
- ii) goods sold by a licensed wholesaler to another licensed wholesaler; and
- iii) goods sold by a licensed exporter to another licensed exporter.

When goods are sold by an assessee, the purchaser has to be furnished with a written invoice of the goods sold stating separately the amount of the sales tax.

The standard rate of tax is 20% on the value of the goods.

Some items of luxury goods are taxed at the enhanced rates which vary from 25% to 30%. Certain items of common use are taxed at the reduced rates which vary from 7½% to 15%.

## WEALTH TAX

Every person whose "Net Wealth" is in excess of Rs. 100,000 during any financial year is required to pay Wealth Tax at the prescribed rates in respect of his "Net Wealth" declared during that year.

Net wealth means the balance of a person's assets which is arrived at after deducting his total liabilities from his total assets. The assets, which for the purposes of Wealth Tax, do not form part of the total assets of a person include:—

- i) Trust properties held in trust for any public purpose of a charitable or religious nature in Pakistan.
- ii) Patents or copyright.
- iii) Interest in any insurance policy before money covered by the policy actually becomes due to the policy-holder.
- iv) The right of a person to receive a pension or other life annuity in respect of past services under an employer.
- v) Personal and household effects (excluding jewellery).
- vi) Tools, implements, jeeps used for agricultural purposes, growing crops, buildings used by the owner as dwelling or store house in connection with agricultural land.
- vii) Tools and implements for professional use.
- viii) Instruments and other apparatus for scientific research.
- ix) Amount of Government Recognised Provident Fund standing to the credit of any salaried employee.
- x) Property received as Gallantry/Merit Award instituted and approved by the Federal Government.
- xi) Personal books and manuscripts which are not intended for sale.
- xii) Compensation Bonds issued under the West Pakistan Land Reforms.
- xiii) Agricultural land upto Rs. 100,000 in value.

*Note:—* This limit on agricultural land applies only in the case of income-tax payers. Wealth Tax, however, is not payable on the value of agricultural land if the person possessing such land is not liable to income-tax under the Income Tax Act, 1922, and if his wealth, excluding the value of such land, is not liable to Wealth Tax.

- xiv) One residential house owned by the tax-payer and used for the purposes of his own residence, if he exercises the option for the exclusion of this asset from his assets.
- xv) Animals.
- xvi) Annuities (if not commutable into lumpsum grants).

The rates of Wealth Tax for 1976-77 are as under:—

- i) On the first 300,000 rupees of net wealth, or where an assessee, being a person owning and occupying a house for purposes of his own residence, exercises the option to have the value of such house excluded from his assets, on the first 200,000 rupees of net wealth .. .. . NIL
- ii) On the next 200,000 rupees of net wealth .. .. . ½%
- iii) On the next 500,000 rupees of net wealth .. .. . 1%
- iv) On the next 500,000 rupees of net wealth .. .. . 1½%
- v) On the next 500,000 rupees of net wealth .. .. . 2%

## ESTATE DUTY

Estate duty is leviable at the prescribed rates, on the principal value of all the movable and immovable property which passes or is deemed to pass to the accountable person or persons on the death of the deceased. Gifts made within five years of the donor's death are to be included in the taxable estate if the same gifts have not been previously subjected to Gift Tax.

The principal value of the property is generally estimated to be the price which it would fetch if sold in the open market at the time of the death of the deceased. There are, however, a few exceptions where the method of valuation has been prescribed by rules such as agricultural land and stocks and shares.

The following exemptions have been permitted for the purpose of assessing the estate duty:—

- i) Property dedicated by way of "waqf" or by way of endowment of a purpose which relates exclusively to religious teaching or worship.
- ii) Immovable property of the deceased situated outside Pakistan. Movable property so situated is also exempt where the deceased owner was not domiciled in Pakistan.
- iii) Gifts given to Government during a period of national emergency before the death of the donor.
- iv) Proceeds of life insurance to the extent of an aggregate sum of 50,000 rupees.
- v) Works of art, drawings, paintings, prints, books, manuscripts, scientific collections etc. etc. bequeathed to government, any university or to a public institution.
- vi) Agricultural land and buildings thereon, the aggregate principal value of which does not exceed Rs. 1,00,000.
- vii) One residential house.
- viii) Growing crops, tools and implements and household effects, such as wearing apparel, furniture etc., etc.
- ix) Jewellery the principal value of which does not exceed Rs. 25,000.
- x) Credit balance of the deceased in a recognised Provident Fund.
- xi) Property received by the deceased from government in pursuance of any Gallantry or Merit award instituted or approved by the Federal Government.
- xii) Moneys payable in Pakistan under one or more policies of insurance effected by the deceased in Pakistan on his life for the sole purpose of paying Estate Duty and assigned to the government for the said purpose.
- xiii) Property of the "Shaheeds" belonging to the Armed Forces or Civil Armed Forces.

The following deductions are also permitted:—

- i) All bonafide liabilities of the deceased (except debts due from the deceased to persons resident outside Pakistan) as on the date of his death.
- ii) A reasonable amount of dower debt in the case of a Muslim and marriage expenses in the case of a Hindu.
- iii) A reasonable amount for funeral expenses.
- iv) Estate duty paid in a foreign country in respect of properties which are to be included in the Estate of the deceased liable to duty in Pakistan shall be deducted from the value of that property and if an agreement for relief from Double Taxation exists between Pakistan and the relevant foreign country, it will be deducted from the Estate Duty payable.
- v) Estate Duty is reduced by the amount of Probate fee paid for obtaining a succession certificate.

The rates of Estate Duty can be modified by the Annual Finance Act. At present the rates of Estate Duty are:—

- |   |  |
|---|--|
| (i) Where the principal value of the estate does not exceed Rs. 1,00,000.                             | NIL  |
| ii) Where the principal value of the estate exceeds Rs. 1,00,00,000 but does not exceed Rs. 2,00,000. | 12½% of the amount exceeding Rs. 1,00,000. |

iii) Where the principal value of the estate exceeds Rs. 2,00,000 but does not exceed Rs. 3,00,000.	Rs. 12,500 <i>plus</i> 17½% the amount exceeding Rs. 2,00,000.
iv) Where the principal value of the estate exceeds Rs. 3,00,000 but does not exceed Rs. 4,00,000.	Rs. 30,000 <i>plus</i> 20% of the amount exceeding Rs. 3,00,000.
v) Where the principal value of the estate exceeds Rs. 4,00,000 but does not exceed Rs. 5,00,000.	Rs. 50,000 <i>plus</i> 22½% of the amount exceeding Rs. 4,00,000.
vi) Where the principal value of the estate exceeds Rs. 5,00,000 but does not exceed Rs. 6,00,000.	Rs. 72,500 <i>plus</i> 25% of the amount exceeding Rs. 5,00,000.
vii) Where the principal value of the estate exceeds Rs. 6,00,000 but does not exceed Rs. 7,00,000.	Rs. 97,500 <i>plus</i> 30% of the amount exceeding Rs. 6,00,000.
viii) Where the principal value of the estate exceeds Rs. 7,00,000 but does not exceed Rs. 10,00,000.	Rs. 1,27,500 <i>plus</i> 35% of the amount exceeding Rs. 7,00,000.
ix) Where the principal value of the estate exceeds Rs. 10,00,000 but does not exceed Rs. 15,00,000.	Rs. 2,32,500 <i>plus</i> 40% of the amount exceeding Rs. 10,00,000.
x) Where the principal value of the estate exceeds Rs. 15,00,000 but does not exceed Rs. 25,00,000.	Rs. 4,32,500 <i>plus</i> 45 per cent of the amount exceeding Rs. 15,00,000.
(xi) Where the principal value of the estate exceeds Rs. 25,00,000 but does not exceed Rs. 30,00,000.	Rs. 8,82,500 <i>plus</i> 50% of the amount exceeding Rs. 25,00,000.
(xii) Where the principal value of the estate exceeds Rs. 30,00,000 but does not exceed Rs. 35,00,000.	Rs. 11,32,500 <i>plus</i> 55% of the amount exceeding Rs. 30,00,000.
(xiii) Where the principal value of the estate exceeds Rs. 40,00,000.	Rs. 14,07,500 <i>plus</i> 60% of the amount exceeding Rs. 35,00,000.
(xiv) Where the principal value of the estate exceeds Rs. 40,00,000 but does not exceed Rs. 45,00,000.	Rs. 17,07,500 <i>plus</i> 65% of the amount exceeding Rs. 40,00,000.
(xv) Where the principal value of the estate exceeds Rs. 45,00,000 but does not exceed Rs. 50,00,000.	Rs. 20,32,500 <i>plus</i> 70% of the amount exceeding Rs. 45,00,000.
(xvi) Where the principal value of the estate exceeds Rs. 50,00,000.	Rs. 23,82,500 <i>plus</i> 75% of the amount exceeding Rs. 50,00,000.

## GIFT TAX

If a person voluntarily makes a gift to any other person of any movable or immovable property, the transferer would be required to pay gift tax on the value of the gift at the prescribed rates.

The gifts exempt from tax include:—

- i) Gift of immovable property situated outside Pakistan.
- ii) Gift to the Government or any Local Authority.
- iii) Gift to approved charitable institutions and Funds.
- iv) Gift (upto Rs. 5,000 only) to any dependent, other than spouse, for support and maintenance.
- v) Gift (upto Rs. 50,000) only to wife/husband.
- vi) Gift of policies of insurance or other annuities (upto Rs. 5,000 only) inclusive of any gift at (iv) to any dependent, other than spouse, for support and maintenance.
- vii) Gift made under a will.

- viii) Gift made in contemplation of death.
- ix) Gift upto Rs. 50,000 only [including the gift at (iv) above, made in the form of dowry on the occasion of marriage of a person's real daughter].
- x) Gifts of an aggregate value of Rs. 5,000 in any previous year.

Note :—Where the dower money as originally fixed at the time of marriage is subsequently increased, the amount by which such increase exceeds the original dower is a taxable gift.

It is open to a person making a gift of not less than Rs. 10,000 in value to pay within 15 days into the Treasury the gift tax payable in respect thereof and if he does so, he will get a rebate of 10% of the amount of the gift tax so paid by him.

The rates of gift tax are:

i)	On the first Rs. 50,000 of the value of all taxable gifts .. ..	5%
ii)	On the next Rs. 1,00,000 of the value of all taxable gifts .. ..	10%
iii)	On the next Rs. 1,50,000 of the value of all taxable gifts .. ..	15%
iv)	On the next Rs. 5,00,000 of the value of all taxable gifts .. ..	20%
v)	On the next Rs. 10,00,000 of the value of all taxable gifts .. ..	25%
vi)	On the balance .. ..	30%

## PROVINCIAL AND LOCAL TAXES

The Provincial and local taxes mostly relate to abiana (or water rate) on water supplied for irrigation, land revenues, tax on electricity, stamp duty, excise duty on liquor, entertainment taxes, motor vehicle tax, municipal/conservancy, water and fire service charges and tax on urban immovable property. The rates of all these taxes have been enhanced in recent years. The tax on urban immovable property and municipal services vary from 12½% to 33½%, the highest rate being reserved for Karachi. The urban immovable property tax is not a graduated tax and it is generally levied on the annual letting value with a rebate for owner-occupied houses. All the provincial taxes are perhaps in their very nature regressive in as much as they bear no relationship to ability to pay.

## TAX REFORMS

Discussion on tax reforms is a favourite pastime of all citizens, particularly economists. The analysis of tax reforms mostly takes a subjective form and people base their recommendations to suit their personal interests. It is, however, very important to maintain a solid measure of objectivity in all matters concerning tax reforms. Gone are the days when taxation could be adjusted to meet each and every demand made by public expenditure.

The rates of taxation in Pakistan are so high that it is important to make downward adjustments in public expenditure. It is equally important to ensure that each of the components of the tax system as well as the tax system as a whole is not to the detriment of savings and investment, economic growth and enterprise. The tax system must also ensure a fairly equitable distribution of the tax burden and provide for justice between man and man and between one class and another. The tax system should not contribute substantially to inflationary pressures through a large tax component in the prices of services and commodities. It is with these considerations in mind that the following tax reforms are suggested for Pakistan:—

- i) The exemption limit for personal incomes should be Rs. 12,000 on all incomes, irrespective of their nature. This has become all the more necessary in view of the tremendous inflationary forces which have enveloped Pakistan during the last three years. Again it has become necessary to reinvigorate private savings and investment.
- ii) For the considerations mentioned in (i) above the progression in the rates of personal income-tax should be made less steep. For instance, income-tax liability on an annual net income of Rs. 30,000 should not exceed 10%; on Rs. 50,000, 20%; on Rs. 75,000 25%; on Rs. 1,00,000 30%, on Rs. 2,00,000 40% and over Rs. 200,000 50%.

- iii) The corporate tax should be levied at a uniformed rate of 50 per cent (this would include both income-tax and super-tax).
- iv) Agricultural income should be included in the purview of income-tax although in this case the exemption limit should be raised to Rs. 24,000 as against Rs. 12,000 for other net income. Land revenues is reported to contribute around 15 per cent of the total tax revenue of the Government although agricultural income constitutes the major part of the total national income. There is little justification for completely ignoring agricultural incomes from the concept of total net income which is the basis for the principle of ability to pay. The arguments against levying income-tax on agricultural incomes have been summarised in a note of dissent in the report of the Taxation Enquiry Committee by the present Speaker of the Sind Assembly, Mr. G. S. Kehar. He has argued as follows :—
  - a) Agriculture has in effect been taxed through control of foodgrains prices and by having to surrender to the Government all the foreign exchange earned from the export commodities at less than the scarcity value of foreign exchange to the economy.
  - b) Unlike industry, agriculture has received no special concession for investment.
  - c) The impossibility of determining the production of various crops on different types of land, accounting for the income in kind enjoyed by the cultivator, ascertaining the effects of natural calamities, and, above all, the lack of trained assessment officers, etc., would create problems.
  - d) Agriculture is a provincial subject and the constitutional obstacle would prevent the imposition of a Central Income-Tax on agricultural income. (With due respect to Speaker Kehar the case for subjecting agricultural incomes to income-tax stands on a firm footing based on revenue raising considerations and for reasons of equity).
- v) Depreciation allowances should be liberalized to enable plant and machinery to be written off within a period of 5 years.
- vi) Since both dividends and interest are subject to double taxation by way of the corporate tax as well as the personal income-tax, it would be desirable if the exemption granted for these two sources of income for purposes of income-tax was raised from the current level of Rs. 5,000 to Rs. 12,000.
- vii) The upper limit of the investment allowance should be increased to Rs. 50,000 and it should be permitted on gross income instead of net income.
- viii) In view of the relative stability in rents and the tremendous increase in prices and wages, the allowance for maintenance and upkeep of property should be increased from one-sixth of rent to one-fourth of rent, and the collection charges permissible should also be raised from 6% to 10% of rent.
- ix) Either the wealth tax should be abolished or the estate duty should be abolished because it is immoral to tax capital both on an annual basis as well as on a lump-sum basis on the death of the assessee. The yield from wealth tax during 1974-75 amounted to only Rs. 45 million while that from estate duty accounted for Rs. 6.2 million. Actually everybody, including the economy of the country, would be much better off without these two taxes on capital. In any case, the rates of wealth tax which have been doubled in 1973 should be drastically reduced.
- x) The gift tax and the estate duty should be integrated. Gifts made during one's lifetime should be added to the wealth of the assessee at the time of his demise at their market value at the time of the gift.
- xi) In view of inflation and the necessity of promoting capital formation, the rates of exemption permitted for estate duty should be increased to at least one house and other assets of the value of Rs. 5,00,000. The personal effects and immovable property of the assessee, barring cash, shares and Government securities, and gold and jewellery, should also be exempted from payment of estate duty. The rate of estate duty should start at 2½% the net wealth after exemption upto Rs. 500,000; 5%



- between Rs. 500,000 and Rs. 1 million; 10% between Rs. 1 million and Rs. 5 million; 15% between Rs. 5 million and Rs. 10 million; and 25% on above Rs. 10 million.
- xii) The sales tax should only be levied at one stage. In the case of finished imported goods it should be levied at the import stage and in the case of locally produced services and manufactured goods at the production stage. The level of sales tax should vary between 10 to 20 per cent depending on the item involved and the compensatory fiscal policy to be pursued by Government.
  - xiii) The rates of excise duty need to be reduced and rationalised. The rates of excise duty should normally vary from 10 to 40 per cent and no more because the items affected are also liable to other taxes, such as sales tax and customs duties.
  - xiv) A lot has been done in Pakistan to rationalise import duties but there are still several cases in which the import duty on raw materials and components does not bear proper relationship to that on comparable finished goods. The rates of import duty need to be reduced in the case of those goods which are not produced in Pakistan although here the revenue consideration may be more important.
  - xv) Export duties should be levied with the utmost judicious care in order not to affect exports. It is better for Government to err on the lower side rather than inflict irreparable damage to the export trade. A couple of years ago the Finance Minister applied the increased rate of export duty on cotton yarn, even to those exports for which letters of credit had already been received. This led to Pakistan's losing for quite some time a large export market for its cotton yarn.
  - xvi) If income-tax is extended to cover agricultural land, then land revenue should be abolished or reduced. Abiana or water charges imposed on agriculture should be related to the actual cost of production of this input and there should be no revenue element in this levy.
  - xvii) Property taxation is almost confiscatory in the case of Karachi. Taxes on property including water charges, fire charges and conservancy charges should not exceed 20 per cent of the annual letting value of property with a rebate of 50 per cent for self-occupied property.

## **NATIONAL DEBT**

### **Nature and management**

National debt commonly arouses suspicion in the minds of even educated citizens, let alone the man in the street. There is confusion in popular thinking about the problems connected with public borrowing and most of the confusion stems from viewing public borrowing as one views private borrowing.

✓ During peace-time, government financing through an increase in the national debt is essentially used for putting to work unemployed resources and/or to add to the productivity of the existing means of production and distribution. A budget deficit represents dis-saving by the Government. If the Government is paying more money in salaries to civil servants, commissions to contractors and so forth, than it is receiving in taxation, and is borrowing the difference by increasing the national debt or the amount of paper money in circulation, then it is in just the same position as an individual who is spending on current consumption more than his income, by means of drawing on accumulated wealth or getting into debt. The result is to increase incomes and expenditures all round. The extra spending will raise the incomes of those on whose output the expenditure is made. Out of this extra income a part will be spent and a part saved. Thus the extra expenditure will lead to such an increase in incomes that the public are saving more than they otherwise would have done, at just the same rate as the government with borrowing.

Classical economists in arguing against accumulation of public debt generally assumed full employment, inelastic monetary supplies, unproductiveness of public expenditure for purposes

other than justice, defence, etc. In their view the Government by borrowing and by taxing to defray interest payments deprive the economy of cash and capital, and the Government's use of resources was less productive than that by private enterprise. Once these economists in a more realistic mood allowed for unemployment, assumed elasticity in monetary supplies, and agreed that Government expenditures could be productive and need not necessarily be wasteful, the case of public borrowing was strengthened. The cash obtained by the Government might come from unemployed cash or out of additional deposits created by the banks; and the labour and capital put to work by the Government might otherwise have been unemployed.

The supporters of deficit finance point to the crucial relation between national income and the debt charges; so long as the former rises adequately, a growing debt need not be feared. In fact a debt growth stimulates the rise of income, and this increased income provides the source from which the increased debt is financed. Given good management of the economy, we shall have rising incomes; and with rising incomes, an increase in debt up to the amounts actually needed to ensure adequate levels of output and employment can be accepted without fear. This, in short, is the position of the public debt school.

On economic issues of the day, economists and businessmen can and have found a measure of agreement on many points. However, the conflict of views on public spending and public debt continues. The greatest fear of the businessman to the growth of public debt, is that, in the process, the Government will drive him out of business. He sees the national debt as an obligation, a fixed charge on the wealth and income of the country. With the rising debt the businessman anticipates a growing burden of taxation. These taxes he thinks will make risk-taking unprofitable and, in fact, may well take profits out of business altogether. Our businessman also envisions a period of repayment of debt once a public debt is incurred. Then, to his mind, taxes will be even greater. Finally, he sees inflation as the inevitable aftermath. Inflation may indeed result if the public on balance sells large amounts of Government securities to the banks or forces the Government to have large recourse to the banks or the currency printing press.

Following a desertion of the market by the public, as commodity prices rise rapidly or taxes fail to rise as rapidly as prices, or as the debt rises above the limits set by the ability to pay taxes, the Government takes recourse to compulsory borrowing from the banks or the printing press. These are real dangers not to be dismissed lightly.

However, the interests of business and society are not always in harmony. The businessman views the problem just from his angle and not from the point of view of society as a whole. Economists concentrate on wasted resources and, therefore, on public spending and its income effects. The economist sees wasted resources arising from unemployment. In the rise of expenditures he sees not only the rise of expenditures but also what it signifies beyond the surface, i.e., the rise of income and wealth that results from it. Whereas the economist is interested primarily in production, employment and distribution of income, the businessman is more inclined, as might well be expected, to concentrate his attention on rupees and on financial obligations. Rupees, not tons; debts, not jobs; taxes, not income—these seem only too often the businessman's only guide-posts. Deficit budgeting by increasing incomes would ensure a consistently increasing market for the goods of the business community. A constantly increasing demand for goods and services should be welcome to the businessman and should allay any fears he has of a growing national debt. But even if the accumulations of debt were against the interests of businessman—and it is not at all clear that it is—it would not follow that debt accumulations should, therefore, cease. Many generations have passed since we could depend on the "inevitable hand" that guided the businessman to act in a manner consistent with his interest and society's at one and the same time.

National debt (apart from the issue of paper money which is in effect non-interest bearing debt) is generally categorised according to the length of time before it is to mature and becomes repayable: short-term or floating, medium-term and long-term.

Short-term or floating debts carry relatively lower rates of interest and appeal to those classes of lenders who wish to hold a part of their assets in liquid form and which they consider as near-money. This class of borrowers includes commercial banks, some financial institutions and foreign governments. In the UK the big holders of the floating debt are the London Discount Houses which are collectively called the Money Market and who generally trade in quiet assets.

The long-term debt, on the other hand, runs for a long period of years (normally 10 or more) and contains a risk element inasmuch as it has to be sold at a loss (before the maturity date) should the rate of interest increase. The demand for long-term securities is generally from insurance companies and other financial institutions, from commercial banks, when their appetite for short-term loans is satiated and the public demand for advances is slack, and from private and public organisations which have the character of a trust (such as trade unions, private trusts, and certain government agencies).

In between short-term and long-term securities there also is a relatively restricted demand for medium-term government securities. The demand for them largely flows from financial institutions which are thus able to bridge the gap which would otherwise exist in the maturity of their investment portfolios. During a war short-term securities attract private investors who are willing to tie up these war incomes for a "medium" period if they are offered worthwhile rates of return.

The aim of debt management in a period of rapid expansion of the debt is to ensure that the floating debt is increased as little as possible, so as to avoid a large-scale creation of near-money. During more normal times debt management becomes a process of refinancing and is, by and large, concentrated on meeting government's chronic requirement for short-term borrowing to bridge the gap in the flow of revenues (which are mostly collected either at the end or at the beginning of the financial year) and those of public sector agencies for long-term financing. In times of emergency debt management can be extended to restricting bank advances, tying up the excess liquidity of banks for a given period through compulsory lending (such as Treasury Deposit Receipts in the U.K.), and by special arrangements which can directly influence long-term rates. In the UK, during war days, a special buyer (a particular broker) was appointed and he stood ready at all times to buy back government securities from holders so that even long-term government securities became a liquid asset.

Sound debt management consists in helping the absolute as well as relative liability for payment of interest and repayment of the principal at a reasonable level. What this level can be is discussed later in this section. Debt management procedures which transfer resources from low-income groups to high income groups are not looked upon with favour; and changes in the rates of interest and in the creation of money supply should depend on the state of the economy and the prevailing strategy of economic policy. The latter consideration requires that if it is desirable to raise interest rates and check private investment or to siphon off excess liquidity, good debt management might imply an increase in the net debt in times of an upsurge in economic activity, and conversely if it is desired to lower interest rates and encourage private expenditure it would be good debt management to reduce the debt more rapidly than it is maturing.

The external national debt sometimes raises the severe problem of finding the foreign exchange resources to service the foreign debt. Repayment also involves transfer of real resources outside national frontiers. All these considerations call for a very wise utilisation of foreign loans.

## **Burden of national debt**

With the growing debt the tax bill rises. If we could estimate the taxes without a public debt, both as to amount and structure, and compare those with the actual tax system, then we might gauge the tax effects of the debt. Even then, it would not be easy to guess the tax structure in a debtless world; for without a public debt total income and income distribution would be changed—with resulting effects on taxes and the tax structure.

What then is the burden of the national debt? A national debt is a debt which the community owes to itself. There remains the fact that not all members of the community are equally

the creditors of this debt and that the national debt is largely concentrated in the hands of a small section of the population (financial institutions). It may be said that the way the money is raised to pay the interest on the debt may place an undue burden on some groups, and that the way it is expended in interest payments may not be in consonance with current ideas of social priority.

It involves taking money from people from whom it ought not to be taken and giving it to people who ought not to receive it. The concept of "transfer burden" however, implies that the national debt is burdensome only in a special sense which derives, not from its size, but from the distribution in the ownership of the debt. A national debt held by a small minority of citizens, which necessitates the yearly transfer of considerable amounts of money to persons already wealthy becomes a stumbling block in any policy—undertaken on social or economic grounds—of reducing the inequality of incomes. In this connection, however, we should notice yet another very relevant factor. Inasmuch as a very large part of the national debt is owned—directly or indirectly—by the higher income groups, they pay in income-tax, wealth tax and ultimately in death duties a substantial percentage of the interest they receive on public debt. However, if a considerable rate of taxation has to be imposed just to off-set the enhanced inequality of incomes which the national debt service produces, less is left over for redistribution properly. This it seems, is the fundamental problem posed by the national debt.

It may be argued that budget deficits might just as well be financed by printing new notes (or by borrowing from the State Bank) which carry no interest than by printing new long-term bonds which carry interest. However, there are two practical difficulties. First, insurance companies and other institutions have made contracts with a multitude of persons which are based on the assumption that liquid funds can be invested without appreciable risk to bring a few per cent of interest per annum. The banking system too is adjusted to be able to invest a substantial proportion of customers' deposits in interest-bearing securities and to use the income partly to cover costs and partly as a source of profit. Disappearance of the rate of interest or even a rapid reduction would necessitate far-reaching and often difficult readjustments with a great number of financial institutions.

Secondly, a policy of deficit budgets will stabilise incomes and profits on a high level. It will greatly reduce the risks of business and thus the risks in long-term private investments. Capital values will rise to even higher levels than those justified by the boom profits. The value of capital in almost all forms is generally amortized in terms of the rate of interest. Elimination of the rate of interest would raise capital values to still higher levels. A sudden reduction or complete disappearance of interest on Government securities would affect the real estate market in a way the short-term effects of which are difficult to foretell.

It is, however, quite within the competence of governments to control the rate of interest at a point so that interest payments do not throw an unbearable weight on the governmental revenues. The United Kingdom Treasury evolved something like an automatic mechanism for this purpose. Assume that the Government wishes to spend Rs. 100 million beyond its revenue. If the subscriptions to the "tap" issue amount to only Rs. 50 million, the rest is financed partly by Treasury Bills and Deposit Receipts and partly by Ways and Means Advances. Thus the money market itself is able to decide in which form it holds the savings which a Government's deficit expenditure has brought into existence. With this technique the long-term rate of interest can be kept absolutely stable. The application of this technique does not depend on the Government incurring a deficit. If the subscriptions to the long-term "tap" exceed the amount the Government wishes to raise, this is an indication that the long-term rate of interest can be allowed to drop. If the price of long-term bonds tends to fall, the Government can always buy such bonds and finance itself by Ways and Means Advances.

### **Inflationary pressures and national debt**

Another very important aspect of the rising national debt is its inflationary aspect. In this connection we consider the monetary aspects of the public debt. What is the relation between public debt and monetary supplies? Does public spending following the accumulation of

public debt inevitably bring inflation? What does historical experience suggest concerning debt and price trends? What is the relation of debt, and the interest rate on public debt, to the accompanying monetary expansion?

In the U.S.A., since 1914, most of the huge deposits created are accounted for by sales of public securities to banks against which the banks give deposit credits. The growing public debt over there has served a very useful function: without debt expansion, monetary supplies might well have been inadequate. The extra spending resulting from deficit budgeting enlarges the cash basis of commercial banks. This enables the banks to make further advances to business or Government. Monetary history does not support the thesis that, in the absence of increased purchases of treasury issues, the banks would have purchased other earning assets in similar proportion.

We might at this point re-examine the possibility of issuing paper currency instead of interest bearing securities. The one important objection to this is that the issue of paper money undermines the confidence of the public in our monetary system much more than does the sale of Government securities yielding a return. In the case of paper currency the Government would rely on compulsion. In the case of Government securities it is a matter of voluntary choice by the buyers, at least to a certain degree.

The second significant point against the issue of paper currency is that the rise in money supply would be considerably greater and more inflationary than under the system of debt finance through sales of Government securities. In the U.S.A. during wartime, issues of Government securities were \$220 billion, and purchase by banks, which may roughly be classified as inflationary sales, were about \$90 billion. Rise of deposits of \$90 billion under the prevailing system should be contracted with an expansion of money (cash reserves) of \$220 billion under the alternative system of issue of paper currency—a far greater stimulus to inflation.

Thirdly, the issue of paper currency would inevitably lead to an exchange of notes for deposits by the public and would, therefore, upset the entire monetary system. Banks ordinarily can turn Government paper money to the State Bank as reserves. Their reserves in such a case would rise immensely and the inflation potential would be staggering. One way out of this would be to increase the reserve requirements of scheduled banks, perhaps approaching 100 per cent. Rise of reserves of these proportions constitute a revolutionary change in banking techniques.

Fourthly, a rapid expansion of monetary supplies and the ensuing excessively rapid reduction in the rate of interest would upset the whole economy. The life insurance companies and banks might well become bankrupt; the effect on capital value in general would be disturbing, if not disastrous. All this leads to the conclusion that the financing of Government debt through the issue of interest-free paper currency is not to be recommended. If the issue of paper currency would jeopardise the banking system, the system of tax financing through sales of loans to financial institutions might appear to be over-generous. The creation of money is virtually a monopoly of the banks. It is incumbent upon the Government to see that the banks do not charge excessively for the exercise of a privilege conferred upon them by the Government.

By buying Government securities and creating deposits the banks undertake a task that is relatively simple and riskless. They certainly should not be allowed more than costs plus a modest profit. With the growth of public debt and with the banks possibly underwriting increasing proportions of it in the future, it is imperative that arrangements be made which are fair to the Governments, to the tax-payers, to the banks and to those who require the services of the banks. Reduced profits on Government issues should be regarded as inevitable, and banks should obtain a large proportion of their gross receipts from non-Government customers, and in particular from service charges. In this manner a given cost can support a higher national debt.

In general, when cash is transferred to the Treasury out of sales to pay for securities, the Treasury spends what otherwise would have been spent by the saver; hence no inflation results. This statement is, of course, subject to certain reservations. Even borrowing from non-banking lenders may be inflationary in so far as the Government obtains and thus aggravates cash or deposits that otherwise would have been idle. The word "may" is significant because against

the rise of active money is to be put the increased supply of goods. If a rise in active money tends to increase prices, a rise in the supply of goods tends to reduce them. When the Treasury borrows from the banks, however, the latter put corresponding deposits at the disposal of the Government. Here the net result is expansion of Government deposits, ultimately to be transferred to their creditors, and, therefore, sales to banks are considered inflationary. Critics of deficit finances are specially concerned over the inflationary effects of the growth of public debt. They assume that inflation is bad for the country because of adverse effects on both production and distribution.

Critics of deficit finance are concerned least, with the expansion of the public debt, the Government will have to borrow relatively more and more from the banks to provide not only the Government's current expenditures, but also to cover interest payments that will be higher each year as more and more Government securities are outstanding. Clearly here we must take into account not only the expansion of money, but also the increase of output that results from putting unemployed resources to work. Prices rise only in response to a significant expansion of demand; they do so even though overall supply may be quite satisfactory. The new demand affects some groups more than others, and some markets more than others. There is no perfect mobility, nor is there a perfect substitutability of one commodity for another, or one material or component for another. It takes time to remove existing bottlenecks. Significant expansion of demand also gives rise to other results. The favoured groups ask for wage increases, not waiting until full employment is attained or excess capacity accounted for. Economic history shows that the expansion of money resulting from deficit financing brings in its wake price rises long before a position of full employment is attained. However, some price instability is a necessary cause of a high employment economy. Perhaps the most important single inflationary factor is wage inflation. Labour will seek increases in rates which may well not be justified by productivity.

An ambitious economic policy based on deficit finance would require stringent wage and price controls. There is, however, a distinct point beyond which monetary expansion will bring galloping inflation, but that point cannot be identified with precision. It all depends and that is as far as the responsible economists dare go. If, for example, the Government continues to depress interest rates and keep prices down and if much uncertainty prevails, liquidity preference will continue to grow; i.e., the public will continue to increase the proportion invested in cash in relation to non-cash assets. A larger part of total monetary supply will be sterilized, and to this extent monetary expansion will not be felt on the markets. If, and in fact as a result of the Government's policies, output continues to rise, then more money will be required to carry through the increased amount of transactions. This will be an off-set to the rise of monetary supplies. Beyond that, the Government must ever be on the watch against inflation.

Inflationary pressures could be off-set by the results of economic growth and availability of consumer goods and services (particularly those which constitute the necessities of life); the time-lag between investment and the period when this investment begins yielding results is also a significant factor.

The Keynesians who first broached the theory of deficit finance, were the first to point out the inflationary dangers of positions of full and near-full employment. The Government must be ready, when necessary, to switch over from an anti-deflationary to an anti-inflationary programme, and to switch over quickly. Much will depend upon the availability and effective use of the arsenal of anti-inflationary weapons, and much will depend on the authorities' capacity to understand the problems and initiative to act so as to keep the situation under control.

## Prices and national debt

Rising prices are helpful in reducing the debt burden, only in so far as they are accompanied, as they generally are, by rising money incomes and increased tax receipts. In periods of falling prices, the cost of debt in terms of goods rises. It does not follow from this, however,

that the burden necessarily rises, for productivity and income may well rise. As population increases, the man-hours of work may well rise and the burden of debt be reduced, as it is apportioned over an increased number of workers. In periods of falling prices, then, it does not follow that the burden of debt necessarily rises. In this context it is necessary to consider money incomes, the latter being dependent *inter alia* on productivity and man-hours of work, as well as prices. The best way to effect reduction in the future costs of debt is clearly by attaining rising money incomes which reflect gains in productivity and the rise in total man-hours of work. Over a long period of time, small annual rise in prices may give the economy a steady lift and may contribute towards a substantial easing of the debt burden. To take the gains of progress largely in falling prices and stable money incomes would bestow upon the rentier class gains not needed by them and deprive the Government—and, therefore, the country as a whole—of a gain (an easing of the tax burden).

## Balance of payments and national debt

The increase in incomes resulting from an increase in the national debt will profoundly affect the balance of payments position. As income rise the home consumption would increase and, therefore, the demand for imports would increase. Imports of capital goods needed for the various development programmes would record a considerable increase. Exports would also be affected by the rise in home prices of the export items unaccompanied by an increase in prices of similar materials in other parts of the world. The short-term solution would perhaps lie in stringent control over prices and imports and/or a subsidy to exports. In the long term period, however, the increase in national production would take care of the increase in domestic demand and thus the need for increasing imports would be obviated. The short-term problem should not, however, be dismissed very lightly. Any country embarking on an ambitious programme of development with the aid of deficit financing should be prepared to resort to a very strict control over prices and imports.

## Measurement of national debt potential

The ultimate size of the public debt will depend in no small part on the costs of non-debt Government services and debt charges in relation to the national income. The rate at which the national debt could be increased annually would depend (if it were decided as a matter of policy not to create additional savings through the sale of Government securities to financial institutions) on the rate of voluntary savings in the country. If the propensity to save is high then, as the national income increases year after year, the volume of annual savings would constantly increase. These would be available to finance the various development programmes. We could, therefore, progressively increase the national debt. This statement is subject to the reservations made earlier.

Kaldor relates the debt potential to the growth in the economy and the increase in the ability to pay taxes. It was quite sometime ago that Kaldor expressed the opinion that the British national money income (at stable prices) should rise over the period 1948–1970 by one per cent, or about £19 million per annum and that this implied that the Government could easily borrow an amount that adds £5 million to the interest charged annually; or at a 2 per cent rate of interest, additional loans would be raised amounting to £250 million per annum. After 1970, the absolute amount that might be borrowed with rising incomes would increase. With taxes at 25 per cent of national income, the Central Government could presumably raise taxes to 25 per cent (if not more) of any additional income. The tax rise in Great Britain would then be about £22.5 million annually and this would be available for financing additional debt charges of a national debt which increased by £1,125 million per year. On reasonable assumptions of taxation, the burden of taxes levied for transfer purposes, the rate of interest,

and income, it may be possible to venture on an estimation of the annual increase in national debt which a country can reasonably afford.

Calculations of this kind leave out of account the sociological and political implications of a vast rentier class and transitory inflationary situations. Advances in management, technology, and science which might even accelerate the rate of gains; improved management, elimination of the losses from unemployment, and excessive movements into distributive and servicing trades might also help. Another factor to be associated with a deficit finance is the growth of income. Against all these favourable factors we should consider the limitation of national resources. At this stage it would be well to repeat what has been written earlier.

"There is, however, a distinct point beyond which monetary expansion will bring galloping inflation, but that point cannot be identified with precision. It depends. And that is as far as responsible economists dare go."

### **General conclusions on national debt in under-developed countries**

The following conclusions emerge in regard to national debt with special reference to under-developed countries.

- i) Economic development, substantially financed through increases in the national debt, is an effective method of accelerating the pace of economic development of a country whose population is under-employed, whose resources are largely unused and in which, due to the low level of the national income, adequate funds cannot be raised by taxation to finance the development projects.
- ii) Of the various ways to cover the budgetary deficit the best is borrowing from genuine savers, namely non-bank investors, individuals and institutions like insurance companies, investment trusts, etc. It is superior to borrowing from the Central Bank or commercial banks as it results in channelling genuine savings into national investment and thereby causes less inflation, whereas borrowing from the banking system leads to the multiplication of credit and inflation. However, both these methods of borrowing may be used to secure the funds required for development purposes. The issuance of new money for covering the budgetary deficit incurred for economic development should be ruled out.
- iii) Monetary expansion, either by printing new money or by borrowing from the Central Bank, is fraught with danger and should not, therefore, be resorted to.
- iv) Expenditure of large amounts by Government for development purposes would increase the incomes of the people and thereby the aggregate demand for goods and services. This would generate inflationary pressure if additional supplies of additional goods and services could not be obtained either by stepping-up the production of the required services and commodities or by increasing the import of these commodities. In an under-developed country neither can the volume of production be increased rapidly due to the existence of several bottlenecks, like the shortage of capital and technical personnel, nor can imports be increased substantially to meet the new demand due to the non-availability of the required amount of foreign exchange. The inflationary situation can be met by regulating prices, production, consumption and imports according to the requirements of the day.
- v) Since the interest charges on the debt to be raised for financing economic development would be fairly high it is necessary that the borrowed funds should be spent only on those sectors which are highly productive and profitable. They should include particularly those whose products are in wide demand and, therefore, likely to counter the inflationary tendencies generated by this increase in the national debt. More specifically the following categories should be included in the spending programme of the Government:—



- a) Increase in agricultural production of foodgrains. There is no more important single factor that can exercise a greater disinflationary pressure than the ready availability of foodgrains in considerable quantities.
- b) Industries producing the consumer goods and the industrial raw materials and spare parts demanded in the country, such as cotton textiles, rayon, fertilizers, insecticides and pesticides, dyes and chemicals, POL products, building material, paper, medicines, vegetable ghee, preserved food and canned fruit, cigarettes, tea, toilet articles, glassware, sanitary ware, ceramics, electrical goods, leather goods, films, and plastics of radios, TV sets, refrigerators, telephones, bicycles, motor cycles and cars and agricultural equipment.
- c) Industries whose products would reduce our imports, such as those mentioned in (b) above, and heavy industries in the metal, mechanical and electrical fields.
- d) Industries whose products would increase our exports, such as rice, cotton and woollen industries, cement, food preservation and fruit canning, tanning and manufacture of leather goods, sports goods and surgical instruments. It is necessary to progress in the direction of the more sophisticated manufactured goods in order to obtain greater gains from international trade.
- e) Education, particularly technical education and other investment in human capital, can also yield fruitful results.
- f) The economic infrastructure which includes the provision of water, power, and transport and communications facilities is a basic requirement for all economic development and commands high priority.
- g) To qualify for debt financing the profit should be such as to enable the Government to pay interest charges on the debt raised for financing it.

### National debt of Pakistan

In 1974-75 the burden of the national debt on every man, woman and child amounted to 1125 rupees. This calculation is based on a total national debt of about 76,000 million rupees and an estimated population of 67.22 million; of the total national debt of about 76,000 million rupees on 30 June, 1975, about 20% is internal debt and 80% was external debt. Of the internal debt the permanent debt was 10,000 million rupees out of which 85% was central debt and 15% provincial debt. Table 20.4 indicates the relationship between the servicing of national debt (repayments of principal and payment of interest) and central revenue as also gross national product at market prices.

TABLE 20.4

*Servicing of national debt and its relationship to central revenues and GNP at current factor cost*

	Internal debt raised in Pakistan	External debt raised in Pakistan	Total national debt (M. Rs.)	Debt servicing including repayment (M. Rs.)	Debt Servicing as % of G.N.P.	
					Central Revenues	Current factor cost
	1	2	3	4	5	6
1950-51	287.2	—	28.2	69.4	5.4	0.33
1954-55	145.0	38.8	183.8	93.7	7.9	0.44
1958-59	216.8	41.2	258.0	169.3	18.6	0.60
1964-65	276.4	1,017.6	1,294.0	432.0	13.0	1.74
						343

1969-70	1554.4	1,544.6	3,099.0	926.6	13.9	2.14
1972-73	1102.6	3,217.6	4,320.2	1298.6	17.1	2.15
1973-74	367.0	4,045.2	4,412.2	2124.0	20.0	2.68
1974-75	2334.4	4,937.2	7,271.6	2060.9	17.0	2.07

*Source :* Ministry of Finance and Economic Surveys.

Debt servicing as a percentage of central revenues has increased from 5.4% in 1950-51 to 7.9% in 1954-55; after 10 years it stood at 13% in 1964-65 and after yet another year in 1974-75 it accounted for 17% of central revenue. In 1973-74 this figure had been higher at 20%; this can be explained by the successful attempt of the government to secure some re-scheduling of its foreign debts.

The debt servicing charges (on both revenue and capital account) constitute a rather serious, and perhaps unbearable, burden when viewed in relationship to central revenues. The position is somewhat less frustrating when debt servicing is considered vis-a-vis the Gross National Product at current factor cost. Debt servicing as a percentage of GNP at current factor cost increased from 0.33% in 1950-51 to 0.44% in 1954-55; ten years later it stood at 1.74% in 1964-65 and yet another 10 years later, in 1974-75, it stood at 2.07%. This was lower than the figure of 2.68% in 1973-74 and 2.15% in 1972-73.

Thus, more than one in every six rupees of central revenue would be required for debt servicing and almost one in every 47 rupees of the gross national product at current factor cost has to be spent for debt servicing. These are somewhat high (although not alarming) figures for a country where the tax system is very progressive and where the extent of graduation in the tax structure is beginning to have adverse effects on incentives, savings and investment.

The low per capita income (Rs. 1432 at current factor cost in 1974-75) and the adverse effects of massive inflationary pressures make it almost inhuman to levy regressive outlay taxes on items of main consumption. This would call for a policy of wise and judicious use of resources for accelerating the rate of economic growth so that the GNP base and that of central revenues grows sufficiently to enable the country to meet its debt servicing obligations which involve a real transfer of resources. The economic objectives of development would have to be stressed even (albeit unfortunately) at the expenses of pressing social needs which do not contribute substantially to economic growth. With some improvement in the existing social and economic infrastructure and a massive injection of resources in the goods producing sectors the country should reach a stage in 5 to 10 years when there will be enough to be shared between all uses—consumption, investment and social welfare. This may well raise the burden of the debt in the short run, but in a few years, with discipline and hard work and with increased production and productivity, the burden of the national debt vis-a-vis GNP and central revenues should reach acceptable proportions.

With effect from the financial year 1974-75, the appropriation "Debt Services" has been bifurcated into two new Appropriations, namely, "Servicing of Internal Debt" and "Servicing of Foreign Debt" to indicate separately the liabilities of the Federal Government on account of interest payments on Internal Debt and Foreign Loans and Credits.

The Appropriation "Servicing of Internal Debt" provides for interest payments of the following nature:—

- (a) Internal Debt, comprising permanent debt having a currency of more than one year and floating debt lasting for a year or less. Permanent debt includes market loans, bond issues, such as Income-Tax Bonds, Prize Bonds, and Government Bonds issued in payment of compensation to shareholders of taken-over industries, undertakings, concerns, etc. Floating debt consists of treasury bills, ways and means advances from the State Bank, cash credit accommodation from commercial banks for Government's state trading operations and other temporary borrowings. Payments made to State Bank for management of internal debt and issue of new loans are also included in this section.

- (b) Unfunded Debt, consisting of (i) provident, contributory and other service funds of Government employees collectively termed State Provident Funds, (ii) Post Office Savings Bank Deposits, Deposit and Cash Certificates, Life Insurance and Annuities etc. commonly known as small savings schemes.
- (c) Other interest obligations and miscellaneous payments involving interest charges on interest-bearing reserve funds and deposit accounts with Government, and expenditure incurred for the promotion of small savings schemes.

The new appropriation "Servicing of Foreign Debt" covers (i) interest payments on foreign loans and credits, and (ii) transfers from current revenues to capital account in redemption of these loans.

Table 20.5 indicates the appropriations for debt servicing in 1974-75.

TABLE 20.5

*Appropriations for debt servicing in 1974-75*

(Figures in million rupees)

<b>A. Internal Debt</b>	
i. Interest on internal debt	675.75
ii. " " unfunded debt	158.83
iii. " " other internal obligations	25.16
iv. " " miscellaneous payments	7.50
	<hr/>
Total of servicing internal debt	876.24
	<hr/>
<b>B. External Debt</b>	
i. Interest on foreign loans	645.79
ii. " " IMF drawing	47.89
iii. " " food credits	57.23
	<hr/>
Total interest on foreign debts	750.91
Appropriation for reduction of debt	443.63
	<hr/>
Total of servicing external debt	1194.54
	<hr/>
<b>C. Total of servicing national debt</b>	
(excluding repayment of internal debt for which published figures are not available)	
	2,061.78
	<hr/>

It would appear from Table 20.5 that the servicing of the internal debt accounts for 42% of the total appropriation for debt servicing and the balance of 58% for servicing the external debt (36% is for interest and 22% for debt repayment). The debt servicing charges on IMF drawings and food credits amount to transferring resources on account of loans taken substantially for consumption; this is not a pretty state of affairs.

The following points should be noted while considering matters relating to the national debt:

- i. The overwhelming part of internal debt is owned by the State Bank of Pakistan and commercial banks and financial institutions which are also State-owned. The State Bank does not pay corporate tax on the interest accruing to it on its holdings of the national debt; the transfer in this case would be a book entry. The State Bank of Pakistan is one institution in the country which has maintained a tradition of strict financial control over expenditure and there is an assurance that its earnings from

holdings of government securities will remain a paper transaction. The policies of State-owned commercial banks and financial institutions are actively controlled by government (which is really a pity) and they are liable to pay corporate income tax; the direct money burden of the national debt held by them is thus reduced.

- ii. The definition of deficit financing adopted by the government is one of convenience and does not conform to sound and accepted principles of public finance. The extent of deficit financing and its inflationary impact is much more than what is claimed in official statements. This point will be discussed in greater detail under Fiscal Policy.
- iii) External debt has been used judiciously and a strong case can be presented for asking for a moratorium on foreign debt servicing.
- iv) The economic growth witnessed by the Pakistan economy between 1954 and 1969 would not have been possible in the absence of substantial increases in the internal and external debt of the country.
- v) The State Bank of Pakistan has not allowed changes in the rate of interest to affect the market prices of government securities and they have enjoyed extensive support from that organisation. Open market operations have also not been used as an instrument of monetary policy to supplement fiscal policy. The establishment of a money market has yet to take roots in Pakistan.

## PUBLIC EXPENDITURE

### Nature, significance and effects

In the developed countries public expenditure generally determines the revenue to be raised by the State and public finance in modern states starts with a given plan of expenditure and income (revenues) is adjusted to expenditure. In this respect public finance differs from private finance in which expenditure has to be planned according to income. In the under-developed countries where raising taxes adversely affects incentives, productions and consumption it is still incumbent to plan expenditure from the revenue side in accordance with the ability to pay principal.

The discussion of public expenditure can best be initiated by referring back to Adam Smith's Classic "The Wealth of Nations." In the chapter on "The Expenses of the Sovereign Commonwealth" (or as we call it, the State), the "duties of the sovereign" fall into three categories.

The first duty of the State is of "defending the society from the violence and injustice of other independent societies"; the second is that of securing internal justice between citizens; and the third is "erecting and maintaining those public institutions and works, which though they may be in the highest degree advantageous to a great society, could never repay the expense to any individual."

The first two duties enumerated by Adam Smith are fundamental to the existence of any civilised State. It goes to the ever-lasting credit of Adam Smith that as early as 1776 he foresaw the use of public expenditure for economic social ends which is now universally accepted as a cardinal principle of public expenditure. Adam Smith's views have had a profound influence on public finance officials starting with William Pitt, who is generally accepted as one of the founding fathers of modern fiscal expenditure.

Adolph Wagner, a German economist of the latter part of the 19th Century, presented his famous "Law of the increase of state activities" in these terms:

"Comprehensive comparisons of different countries and different times show that, among progressive peoples, with which alone we are concerned, an increase regularly takes place in the activity of both the central and the local governments. This increase is both extensive and intensive: the central and local governments constantly undertake new functions; while they perform both old and new functions more efficiently and completely. In this way the economic needs of the people, to an increasing extent and in a more satisfactory fashion, are satisfied, by the central and local governments."

The statistics on expenditures throughout modern times demonstrate such persistent increases as to justify Wagner's statement of this fact as a "law".

The general attitude to public expenditure varies a great deal from person to person.

Benjamin Franklin in 1882 expressed the *laissez faire* attitude toward government very common in his day: "Perhaps in general it would be better if government meddled no farther with trade than to protect it, and let it take its own course. Most of the statutes, or acts, edicts, and placards of parliaments, princes, and states for regulating, directing or restraining trade, have, we think, been either political blunders, or jobs obtained by artful men for private advantage, under pretence of public good."

This was the view also of John Stuart Mill, who held that "the business of life is better performed when those who have an immediate interest in it are left to take their own course, uncontrolled either by the mandate of law or by the meddling of any public functionary." Mill admitted that there were many exceptions, but held that the burden of proof lies upon those who favour governmental interference. He supported his general proposition on the following grounds:

- i) Governmental interference restricts liberty. We need constantly to be on guard against tyranny.
- ii) The individual is most interested in his own affairs and the best judge of his own interest.
- iii) Governments are inferior in the operation of industry and commerce to private enterprise.
- iv) People acquire education and gain self-reliance by doing things for themselves.

A modern expression of much the same attitude towards government can be found in Walter Lippmann's "The Good Society". Of recent developments in Europe, Mr. Lippmann says, "Though depotism is no novelty in human affairs, it is probably true that at no time in twenty-five hundred years has any western government claimed for itself a jurisdiction over men's lives comparable with that which is officially attempted in the totalitarian states." He regrets that "nearly everywhere the mark of a progressive is that he relies least upon the increased power of officials to improve the conditions of men"...forgetting "how much of what they cherish as progressive has come by emancipation from political dominion, by the limitation of power, by the release of personal energy from authority and collective coercion"

Lippmann expresses the fear that government has or will become too large to be managed by finite men, that it will be under the constant strain of pressure a groups battling for spoils, and all this merely leads eventually to the end of both democracy and peace. He conceives of government as mostly imposed upon the governed, a policeman who needs to be constantly told the proper bounds of his authority.

Then there is the progressive attitude to public expenditure. The so-called progressives hold that the individualism of the past is outmoded. Instead of the slogan "paddle your own canoe," they say that "we are all in the same boat." They think of the government not as a policeman but as a cooperative. They tell the working man and the farmer that the government is his partner and that he cannot hope to solve his problems except through its aid. The ultimate boundaries of governmental and private spheres should be determined not by deductive analysis but by the experimental test of trial and error.

The "progressives" stress the contention that the automatic controls have been tremendously weakened by the development of the huge factory and the equally huge corporation. Some would use the power of government to turn back the onrush of "bigness" and "monopoly". Others accept these developments as inevitable and urge the government to assume a large measure of control over concentrated industry. Others urge the government to take over such industries and operate them directly. Approaching the problem from a different angle, some are contending that the time is ripe for economic planning, by which they mean the substitution of governmental blue-prints for automatic controls.

There are some among those who feel that private industry, as now constituted, fails to serve the public interest who look to private and voluntary organizations of consumers for salvation. Many of these deplore the prospect of an ever larger and stronger government. In Sweden, for example, an aggressive and competent consumers' cooperative movement has succeeded over a

considerable field in preserving competition and in protecting the consumer. The proponents of a strong and positive government reply, however, that consumers' cooperation, although it may play a useful role, has not demonstrated its capacity to regulate the heavy industries. Moreover, they say that consumers' cooperation grows slowly and requires great capacity for democracy among its constituents to ensure its success.

Those who favour the expansion of government on the commercial or industrial front are hopeful that some new techniques—notably, the government corporation—can be perfected to simplify the task of public administration. They point out that many modern corporations, and particularly holding companies, are notoriously complex institutions, rife with many of the sins of bureaucracy. Moreover, many are flagrantly irresponsible and top-heavy in control. They see these conditions a justification for replacing private enterprise at certain points with government ownership and operation.

Attitudes toward the proper scope of government range all the way from that of the Socialists; who believe that government should assume the ownership and management of all the essential means of production, to that of the extreme individualists, who hold that the best of all possible governments is the one most limited in its activities. It is probably correct to say that in most countries the predominant view is that governments should assume an active and positive role both in the control of industry and in the provision of services, but that they should leave in private hands, and mainly under private control, the chief functions of the economic system.

Complaints against the widening scope of government and the mounting public expenditure are very common, though by no means a new development. They come partly from those who resent what they regard as an undue extension of government and partly from those who object to making large outlays for which they see no direct and immediate return. It is curious how many people object strenuously to taxes and yet protest vigorously at any suggestion to cut some governmental service in which they happen to be interested.

It is grossly incorrect to advocate that government expenditure is not productive. A highway or railway which is developed by public expenditure is just as productive as a privately-owned shipping company. There are the self-liquidating outlays where the beneficiaries are prepared to pay for these services in the same way that they pay for privately produced goods and services. Publicly-owned utilities are a good example of self-liquidating outlays. Then there are the reproductive outlays which create economic advantages for the community through which the national income and tax base will be enlarged in the future. Expenditure on education and health are good illustrations of reproductive expenditure. Thirdly, there are public outlays which are productive but which are not self-liquidating or reproductive; they add to leisure and in this sense add to the national income. Public expenditure on parks and museums would fall in this category. Finally, there is unproductive or wasteful expenditure; instances of this kind abound in the under-developed countries. The most striking example of unproductive expenditure is that on defence beyond what can be justified by the prevailing or anticipated political tensions.

Public expenditure can be justified on a number of grounds:

- i) It is investment which adds to the future strength of the economy.
- ii) It adds to human enjoyment and leisure.
- iii) It saves greater future outlays.
- iv) It gives employment and spreads purchasing power.

A distinction should be made between public expenditure for current operating expenses and expenditures on capital outlay. An example of the former are the wages and salaries paid to the functionaries of government, while the construction of a school building is an example of the latter. Capital expenditure is usually for durable goods and in private business it is written off through annual depreciation rather than being offset as a single item against current income. Capital expenditure of the State for durable goods and productive equipment, which may or may not be self-liquidating, is shown as capital outlay which is kept distinctly separate from the current operating expenses of government.

Another classification of government expenditure is to distinguish between resource consumption and transfer expenditures. Transfer expenditures consist of debt servicing, subsidies and

loans and grants. The resource consumption expenditures of the State, which cover both current and capital expenditure, constitute the largest slab of public expenditure.

## EFFECTS

Ideally, public expenditure should be based on the principle of maximum social advantage. In simple language, it implies that every rupee should be spent by the State for obtaining the maximum social advantage. This concept primarily deals with the *effect of public expenditure*, which can be considered under three broad categories:

- i) effects on production;
- ii) effects on distribution; and
- iii) Other effects.

Effects of public expenditure on production can again be sub-divided (as was done while analysing the effects of taxation) into effects on ability to work, save and invest; desire to work and save; and diversion of resources as between employments and localities. Public expenditure should improve the ability to work by improving people's efficiency through the provision of health and education facilities. Ability to save will also improve by public expenditure providing services which, in its absence, individuals would have to arrange themselves. Ability to invest would improve if public expenditure provided funds for investment to either public or private agencies. The effects of public expenditure on the desire to work, save and invest will, as in the case of the effects of taxation, depend on the expectation of future benefits from expenditure and its character. By giving the people expectation of future benefits from public expenditure, it may blunt the edge of the desire to work and save.

The granting of an old-age pension, insurance against sickness and unemployment and provision of education at State expense may make the people indifferent towards the future and make them stop saving. This is bound to affect adversely exertions in the present. People will work less. But if such expenditure is kept within proper limits and if it helps the really helpless the adverse effects on work and saving may be negligible. Regarding the diversion of resources as between employment and localities, the public expenditure may have a distinctly beneficial effect on production. Through the system of bounties and subsidies a government may succeed in diverting resources to hitherto neglected channels and thus create new industries. In the same manner, by spending money on the development of backward areas government may add to the total production in the country.

The effects of expenditure on distribution tends to reduce the inequality in the distribution of income. While taxation is levied according to ability to pay, public expenditure should be incurred in accordance with the ability to receive. It is an admitted fact that benefit to the poor from State activities is greater than to the rich. A rich man can protect himself. He can make arrangements for the education and medical relief of himself and his family. But a poor man is helpless. It is, therefore, the poor man who benefits the most from the State activity. To this extent, the State expenditure seeks to bridge the gulf between the rich and the poor. There are certain expenditures which benefit the poor exclusively and primarily, e.g., poor relief, old-age pensions and unemployment and sickness benefits. The benefits derived from such social services by the poor may be regarded as a net addition to their income.

Dalton has rightly stated: "The extent of redistribution, that is to say the combined effects on distribution of the raising and spending of public revenue, varies greatly from one public authority, and from one period of time, to another. In those modern communities which have adopted both progressive taxation and a large expenditure on social services, it is likely that the combined effects of taxes and of grants or subsidies—of positive and negative taxes—has been substantially to reduce inequality."

Other effects of public expenditure should be analysed with reference to:—

- i) The cost of administering public expenditure. This should be kept as low as possible and there should be no inefficiency in the implementation of expenditure policies.

- ii) The effects on employment and the level of national income. The maintenance of a high and stable level of employment is now accepted as one of the primary aims and responsibilities of the State. Government is now required to resort to compensatory spending to offset deficiencies in private spending. On a modest scale compensatory spending when national income is falling may be undertaken to offset further decline and to stabilize economic activity somewhere below the full employment level. More ambitious use of compensatory spending would impose upon government the obligation to spend in order to reach and maintain national income at the full employment level.

Finally, compensatory expenditure in a recession or depression may take place under conditions which reverse declining anticipations, encouraging private spending. If this occurs, the government spending is of the "pump-priming" variety; by artificial support of national income it both arrests further decline and promotes normal recovery. Compensatory spending thus implies substitution of government spending for private spending in order to maintain national income at a given level. When such a policy is pursued during a recession or depression, it involves heavy government expenditure. During the recovery the tapering-off of compensatory expenditures is indicated, and in prosperity when the rate of private spending is rapidly rising or dangerously high, government spending should become negative, i.e., an excess of taxation over expenditure.

The State can practise three broad categories of economy in its expenditure: First, parsimony which implies keeping governmental expenditures to the lowest possible level (this today is unacceptable); secondly, obtaining the most output from the least input (expenditures on social welfare including education and health, as also expenditures on defence and civil administration would fall in this category); and, thirdly, the balancing process which consists of a wise and intelligent selection of the intents of public expenditure and of public as against alternative private expenditure which may become impossible if the government pre-empts private funds through taxation.

The third principle is widely accepted. It involves the government deciding which it needs most, a new municipal hall or higher pay for school teachers, and whether either should be voted in preference to more food or automobiles which the tax-payers might enjoy privately were they not taxed as contemplated. To provide public luxuries at the expense of private necessities is a violation of this principle and one that is too often exemplified in practice. Although this principle is elementary and in accord with the clear dictates of common sense, its intelligent application is neither simple nor easy. Pressure groups sometimes control the votes of legislatures, in which case voting may become, not a matter of seeking the maximum social advantage, but of retaining public office.

The growth of public expenditure can be attributed to increase in population, inflation, improvement in living conditions, a stupendous increase in the demand for social services designed to promote the social welfare following the development of a social conscience, development of cultural interests, political tensions, generating wars and local skirmishes, wastefulness and inefficiency in administration, concentration of business, requirements of economic growth and maintenance of full employment, and the development of the democratic process.

Public expenditures can be broadly classified under the following categories:—

- i) maintenance and equipment of armed forces and police in normal times and war time;
- ii) administration of justice;
- iii) maintenance of the Head of State and of diplomatic representatives abroad;
- iv) maintenance of the civil administration, including ministers, legislatures and civil servants;
- v) servicing of the public debt;
- vi) expenditures directly incurred on fostering economic growth; and
- vii) social expenditure on health, education, children's allowances, pensions, subsidies, etc.



Public expenditure has the natural tendency of increasing by leaps and bounds and Parkinson's Law applies to the civil administration with full force. As Edwin Cannan said in 1908: "There are many things which we can trust Edward VII to do for us, which we should not have expected from Edward VI". Whether we like it or not there is going to be more and more government in our times and this is a historical evolution which all of us will have to learn to live with. As long as the activities of the public sector do not impinge on the fundamental human rights which are now universally accepted (but not necessarily practised), do not adversely affect the Rule of Law, and do not seriously interfere with the ability and the desire to work, save and invest, the future of the human race is by no means jeopardised by the extension of governmental activity.

## Control of Public Expenditure

Control on public expenditure is exercised for several considerations:—

- i) Waste should be avoided and public expenditure should be undertaken in accordance with firm priorities and that it should be wisely and efficiently used for securing the objectives laid down by the State. It essentially involves that the expenditure plan as submitted to the legislature is satisfactory and provides for an efficient transfer of resources to the public sector and for its distribution in accordance with the policy of the government of the day.
- ii) The public expenditures plan should be in accordance with the wishes of the appropriate legislature and public expenditure should be in accordance with their decisions.
- iii) Fraud, misappropriation and embezzlement of public funds should be avoided through a careful system of checks and balances.

The legislature has two main financial functions: one is to appropriate expenditures and the other is to find adequate ways and means to cover the appropriations. The younger William Pitt, rightly called the Father of the Budget, introduced the practice of laying the whole financial year's programme before Parliament in a single whole—on the one hand the Estimates for all Departments, on the other the total revenue estimated to be required to cover them. Pitt also laid the foundations of a consolidated accounting system in the U.K. by transferring the accounts of all departments to the Bank of England.

Modern practice, whereby the Estimates of Expenditure, and of revenue changes, are each passed in a single Act, is essentially a development of Pitt's reforms; so too is the single Exchequer Account at the Bank of England (the Bank balance of the Consolidated Fund), whereby all in-payments to the government, and all out-payments to and by Departments pass through the hands and are under the control of the Paymaster-General. The device of the Consolidated Fund enables the Treasury very simply to keep a watch over the departments, and makes it possible for the Cabinet to ascertain at any time roughly how things are going, simply by examining the receipts and payments of the Fund. The single Finance Act ensures that Parliament will agree on the necessary taxes, and will do so in plenty of time.

For policy the single Appropriation Act is still more important, since it ensures that Parliament has really had the opportunity of considering the entire annual layout of public funds as a whole. For the routine supervision of the Executive, Parliament relies on the Treasury. The operation of Treasury control is a continuous day to day process, all proposals for expenditure on new services for extension of existing services requiring Treasury approval before they are put in hand. The submission to, and detailed examination by, the Treasury of the annual Estimates serve to crystallize each Department's expenditure into a picture of twelve months' cash requirements, and thus super-impose on the "running" control a more sharply defined "short-term" control once a year. The two forms of control are complimentary: in sanctioning any new expenditure the Treasury is mindful of its effect on the current year's budget, while the examination of a particular year's Estimate provides the opportunity for a comprehensive review of the whole of a Department's activities and the general trend of its expenditure.

## IN PAKISTAN.

Pakistan's 1973 Constitution provides that a Money Bill shall originate in the National Assembly and after it has been passed by the Assembly it shall, without being transmitted to the Senate, be presented to the President for assent. Article 4 of the Constitution further provides that a Money Bill or a Bill or amendment which if enacted and brought into operation would involve expenditure from the Federal Consolidated Fund, or withdrawal from the Public Account of the Federation, or affect the coinage or currency of Pakistan or the constitution or functions of the State Bank of Pakistan, shall not be introduced or moved in Parliament except by or with the consent of the Federal Government. A Money Bill is one which contains provisions dealing with all or any of the following matters, namely:—

- a) the imposition, abolition, remission, alteration or regulation of any tax;
- b) the borrowing of money, or the giving of any guarantee, by the Federal Government, or the amendment of the law relating to the financial obligations of that Government;
- c) the custody of the Federal Consolidated Fund, the payment of moneys into, or the issue of moneys from, that Fund;
- d) the imposition of a charge upon the Federal Consolidated Fund or the abolition or alteration of any such charge;
- e) the receipt of moneys on account of the Public Account of the Federation, the custody or issue of such moneys;
- f) the audit of the accounts of the Federal Government or a Provincial Government; and
- g) any matter incidental to any of the matters specified in the preceding paragraphs.

A bill shall not be deemed to be a Money Bill by reason only that it provides:—

- a) for the imposition or alteration of any fine or other pecuniary penalty, or for the demand or payment of a licence fee or a fee or charge for any service rendered; or
- b) for the imposition, abolition, remission, alteration or regulation of any tax by any local authority or body for local purposes.

The Constitution also makes the following provisions for controlling public expenditure:

- i) **Federal Consolidated Fund and Public Account.** (1) All revenues received by the Federal Government, all loans raised by that Government, and all moneys received by it in repayment of any loan, shall form part of a consolidated fund, to be known as the Federal Consolidated Fund.  
(2) All other moneys:—
  - (a) received by or on behalf of the Federal Government; or
  - (b) received by or deposited with the Supreme Court or any other Court established under the authority of the Federation;shall be credited to the Public Account of the Federation.
- ii) **Custody etc. of the Federal Consolidated Fund and the Public Account.** The custody of the Federal Consolidated Fund, the payment of moneys into that Fund, the withdrawal of moneys therefrom, the custody of other moneys received by or on behalf of the Federal Government, their payment into and withdrawal from, the Public Account of the Federation, and all matters connected with or ancillary to the matters aforesaid, shall be regulated by Act of Parliament or, until provision in that behalf is so made, by rules made by the President.
- iii) **Annual Budget Statement.** (i) The Federal Government shall, in respect of every financial year, cause to be laid before the National Assembly, a statement of the estimated receipts and expenditure of the Federal Government for that year, in this Part referred to as the Annual Budget Statement. (2) The Annual Budget Statement shall show separately:
  - a) the sums required to meet expenditure described by the Constitution as expenditure charged upon the Federal Consolidated Fund; and

- b) the sums required to meet other expenditure proposed to be made from the Federal Consolidated Fund and shall distinguish expenditure on revenue account from other expenditure.
- iv) **Expenditure charged upon Federal Consolidated Fund:** The following expenditure shall be expenditure charged upon the Federal Consolidated Fund:—
  - (a) the remuneration payable to the President and other expenditure relating to his office, and the remuneration payable to:—
    - (i) the Judges of the Supreme Court;
    - (ii) the Chief Election Commissioner;
    - (iii) the Chairman and Deputy Chairman;
    - (iv) the Speaker and the Deputy Speaker of the National Assembly;
    - (v) the Auditor-General;
  - (b) the administrative expenses, including the remuneration payable to officers and servants of the Supreme Court, the department of the Auditor General and the office of the Chief Election Commissioner and of the Election Commission and the Secretariats of the Senate and the National Assembly;
  - (c) all debt charges for which the Federal Government is liable, including interest, sinking fund charges, the repayment or amortisation of capital, and other expenditure in connection with the raising of loans and the service and redemption of debt on the security of the Federal Consolidated Fund.
  - (d) any sums required to satisfy any judgement, decree or award against Pakistan by any court or tribunal; and
  - (e) any other sums declared by the Constitution or by Act of Parliament to be so charged.
- v) **Procedure relating to Annual Budget Statement.** (1) So much of the Annual Budget Statement relating to expenditure charged upon the Federal Consolidated Fund may be discussed in, but shall not be submitted to the vote of, the National Assembly.

(2) So much of the Annual Budget Statement relating to other expenditure shall be submitted to the National Assembly in the form of demands for grants, and the Assembly shall have power to assent to, or to refuse to assent to, any demand, or to assent to any demand, subject to a reduction of the amount specified therein.

Provided that for a period of ten years from the commencing day, or the holding of the second general elections to the National Assembly, whichever occurs later, a demand shall be deemed to have been assented to without any reduction of the amount specified therein, unless, by the votes of a majority of the total membership of the Assembly, it is refused or assented to, subject to a reduction of the amount specified therein.

(3) No demand for a grant shall be made except on the recommendation of the Federal Government.

**(vi) Authentication of schedule of authorised expenditure.**

- (1) The Prime Minister shall authenticate by his signature a schedule specifying:—
  - (a) the grants made or deemed to have been made by the National Assembly under Article 82 (relating to Annual Budget Statement); and
  - (b) the several sums required to meet the expenditure charged upon the Federal Consolidated Fund but not exceeding, in the case of any sum, the sum shown in the statement previously laid before the National Assembly.
- (2) The schedule so authenticated shall be laid before the National Assembly, but shall not be open to discussion or vote thereon.
- (3) Subject to the Constitution, no expenditure from the Federal Consolidated Fund shall be deemed to be duly authorised unless it is specified in the schedule so authenticated and such schedule is laid before the National Assembly as required by clause (2).

(vii) **Supplementary and excess grants.** If in respect of any financial year it is found:—

- (a) that the amount authorized to be expended for a particular service for the current financial year is insufficient, or that a need has arisen for expenditure upon some new service not included in the Annual Budget Statement for that year; or
- (b) that any money has been spent on any service during a financial year in excess of the amount granted for that service for that year;

the Federal Government shall have power to authorize expenditure from the Federal Consolidated Fund, whether the expenditure is charged by the Constitution upon that Fund or not, and shall cause to be laid before the National Assembly a Supplementary Budget Statement or, as the case may be, an excess Budget Statement setting out the amount of that expenditure, and the provisions of Articles 80 to 83 shall apply to those statements as they apply to the Annual Budget Statement.

Expenditure from the Federal Consolidated Fund is outside the jurisdiction of the legislature. This would be a serious matter in the developed countries but in so far as the less developed countries are concerned it does suit their genius.

The constitutional provisions for the management of provincial finances are analogous to those for the Federal government.

## DELEGATION OF FINANCIAL POWERS

In Pakistan over the past few years, the system of financial control, which previously provided for a stringent item-wise scrutiny of departmental expenditure by the Ministry of Finance, has undergone a change. The object was to bring the Departments into closer relationship with the Ministry of Finance in a common endeavour for the best utilisation of the scarce resources and to introduce such changes in the machinery and procedures as will render the system better informed and more speedy but without diluting the assence of financial control.

Under the revised system, which was introduced in 1966, the departments have been delegated more financial powers and the Management have been given greater responsibility in framing budget estimates and exercising expenditure control. The financial procedures have the necessary ingredients of an effective central budgetary and expenditure control and at the same time provide adequate freedom of action and financial powers for the departments to fulfil their operational obligations and maintain the desired level of efficiency of the forces.

There is a common misunderstanding that central management of funds allocated to various fields of Government activities are the responsibility of the financial authorities. This is not correct. In fact the control and management of the budget initially rests with the Executive Management and the position of financial authorities is only secondary. In the matter of control, the acquisition of funds is a first step and the restricting of expenditure within the grants is the second. While assessing the requirements the Executive authorities have to determine budgetary needs in respect of various items of expenditure on the basis of laid down rates, scales, specifications and other entitlements, keeping in view the necessity of the requirements in general as well as the extent of particular requirements.

The Ministries receive proposals from lower formations (Departments or attached offices) or initiate such requirements themselves. They have to scrutinise and substantiate these requirements item-wise with reference to their necessity.

The Ministry of Finance goes into the scrutiny of such proposals in detail both from the point of view of quantity and quality. Care is also taken to see whether the cost of such proposals as planned by the Ministries concerned could be met within the resources available for a particular year or whether the programmed expenditure needs phasing over a number of years to match the availability of financial resources for Defence. Once the allocation is approved it is distributed over the various Ministries and then follows the stage of controlling the expenditure against allocated amounts. The concerned ministries jointly with the Ministry of Finance are responsible for ensuring that expenditure does not proceed at a rate unwarranted by the sanctioned allocation. It is through the Heads of Ministries that the Ministry of Finance more directly watches and controls expenditure against budget provisions. If at any stage it

appears that the total sanctioned provisions under any item of expenditure are likely to be exceeded, prompt information is to be given to Finance and application is to be made for a further appropriation to meet the probable excess. It is the duty of the concerned Ministry to keep itself informed of the expenditure actually or likely to be incurred and to communicate to Finance the circumstances leading to the need for supplementary appropriation. In order to ensure the correct appropriation of money, definite limits are previously assigned to the aggregate as well as to the details of expenditure.

The duty of enforcing these limits rests firstly with the controlling authorities, i.e., the Ministries, and only secondly with the Ministry of Finance. The Ministry of Finance comes in to play its role only after a case of appropriation etc. has passed through close and careful scrutiny. The function of the financial authorities in such cases is to see that the requirement is really inescapable and is not manageable through any saving elsewhere in the overall Defence budget. If it is finally felt by the financial authorities as well that additional funds are needed over and above the allocated budget for any items of expenditure, a request for a Supplementary Grant is sent to the legislature for consideration and there it has to be processed, agreed or rejected with reference to the resource position.

The Auditor General and the Accountant Generals used to be powerful institutions in Pakistan as was the Public Accounts Committee appointed by the legislature which went into the details of scrutinising, whether the public expenditure incurred was sanctioned and spent as laid down by the legislature. Many a brave senior official shuddered to appear before this Committee.

Public expenditure in Pakistan is no longer subject to tight and serious financial scrutiny. Not that there are widespread cases of fraud or misappropriation, but public expenditure is sometimes squandered for purposes which should not normally correspond to the priorities established for an under-developed country.

The most serious cause for concern is the use of supplementary budgets. When the supplementary budgets of the provincial governments almost equal the approved budgets and the supplementary budget of the Federal Government is 30 to 40 percent of the size of the approved budget, as happened during 1974-75, then the Executive branch of government either does not have vision or its initial demands are kept deliberately low to hoodwink the legislature and the public. Public accountability is the cardinal principle of all public finance transactions, particularly public expenditure. The practice of an unreasonably large supplementary budget makes complete nonsense of the concept of public accountability.

## Public expenditure in Pakistan

The public expenditure in Pakistan has been increasing by leaps and bounds. There has been an all-round increase in every sphere of public activity: civil administration, debt servicing, subsidies, defence and development. Actually defence and development have made the largest single claims on the country; both make demands on the same resources and to the extent that more is allocated for one sector less is available for the other. Table 20.6 indicates the growth of revenue and capital expenditures of the federal government since 1950-51.

TABLE 20.6  
*Revenue and Capital Expenditure of Federal Government*

(Million rupees)						
Year	Civil Administration and Expenditure	Debt Services	Defence Services	Other Expenditure met from Revenues	Capital Expen- diture including Develop- ment Expenditure	Total Central Expen- diture
On revenue earning departments						

	Amount	% of total expenditure	% of central revenue	Amount	% of total expenditure	% of central revenue	Amount (revenue and capital expenditure)	% of total expenditure	% of central revenue	Amount	% of total expenditure	Amount	% of total expenditure	Amount	% of GNP at current factor cost
1950-51	191.4	10.8	15.0	69.4	3.9	5.4	703.0	39.8	55.2	57.8	3.2	701.1	39.7	1,765.7	8.5
1954-55	258.9	14.0	22.0	193.7	5.1	7.9	713.4	38.8	60.8	109.3	5.9	695.3	37.8	1,836.9	8.6
1958-59	450.5	15.5	22.9	169.3	5.8	18.6	1,036.5	35.8	52.9	235.4	9.5	1,565.1	54.0	2,893.5	10.3
1964-65	96.2	1.7	2.9	432.0	7.9	13.0	1,262.3	23.3	38.2	419.2	7.7	2,880.6	53.1	5,416.7	21.9
1969-70	681.7	5.6	10.1	1,926.6	7.6	13.9	2,689.3	22.3	39.9	454.1	3.7	6,080.0	50.4	12,054.8	27.8
1972-73	869.6	6.4	11.5	1,298.6	9.5	17.2	5,205.4	38.3	69.1	437.3	3.2	7,409.3	54.6	13,558.5	22.4
1973-74	1,281.5	6.9	12.1	2,124.0	11.5	20.0	4,964.7	26.9	46.7	864.4	4.7	11,426.8	62.1	8,391.2	23.3
1974-75	1,345.5	5.7	11.0	2,060.9	8.7	17.0	6,294.3	26.0	50.7	1,347.3	5.7	11,810.5	50.1	23,698.7	23.7

Source: Ministry of Finance and Economic Survey.

Total central expenditure has increased from 1,765.7 million rupees (8.5% of GNP) in 1950-51 to 23,538.7 million rupees (23.7% of GNP) in 1974-75. It has almost doubled since 1969-70 although more than half the country (in terms of population) has been separated.

The cost of civil administration including the expenditure on revenue earning departments has registered an unconscionable increase from 681.7 million rupees in 1969-70 to 1,345.7 million rupees in 1974-75. This is due partly to inflation and partly to the expansion of the functions of government under Prime Minister Bhutto's government. But by an and large the main cause of this increase is that the work of one official is being done by at least three, if not four or five persons. It is true that some officials are overworked but this is on account of a mal-distribution of functions. Besides there is an unbelievable duplication of work. Many civil servants, particularly those on the lower, middle and upper middle rungs of administration spend most of their time on tea and gossip and the unfortunate few bear the entire burden of the civilian administration. It has also become fashionable to keep late hours, enjoying the air-conditioned comfort of the Islamabad Secretariat.

The administration is also top-heavy. There are too many Secretaries, Additional Secretaries and Joint Secretaries floating around and creating unnecessary work in the finest traditions of Pakistan's Law. Accelerated promotions have created a class of frustrated "have-nots", and the system of lateral entry into the services has created a much bigger class of discontented rejects as compared to the handful and hand-picked chosen few who were lucky to win a prize-winning ticket in the lateral appointment lottery. The practice of employing people, who have crossed the mandatory age of retirement, against regular cadre posts adds to the general pace of frustration.

The departments of the Federal and Provincial Governments need to be thoroughly scrutinised with a view to keeping the right number of civil servants with the right qualifications and experience.

In the Central Government the provincial quota system should be limited to not more than 50% of the total, and merit-cum-seniority should be the criterion for promotions and appointments. The pride of performance of the civilian administration should be restored as should its efficiency. The strength of staff should be reduced drastically, so as to conform to the legitimate requirements of the various departments. What staff is to be kept should be paid well, well looked after, given the respect they deserve, and assured security of tenure. Government departments should not be converted into employment agencies; that function should be assigned to the more productive sectors of the economy. Besides the fashion of decimating the top echelons of the civil services with a view to asserting authority, which began with President Ayub in 1959 and has ever since been continued on an ever-increasing scale, should be stopped once and for all. The civil services serve every administration jealously and it is but natural that the best among them would become the blue-eyed boys of the administration. The change in administration should not deprive the country of their services. At one time the administration of

the Pakistan government was second to none in the world, but unfortunately we have now joined the rank and file of the Third World countries whose civil administrations by no means enjoy an enviable reputation.

**Defence expenditure** has also registered a substantial increase. It has increased from 2,689.3 million rupees in 1969-70 to 6,294.3 million rupees in 1974-75. It now accounts for some 26% of total Federal expenditure and 50.7% of Federal revenues. Defence expenditure has been universally condemned as being unproductive and a waste of valuable national resources. Yet almost all countries of this big wide world spend a large proportion of their scarce resource on this supposedly wasteful sector. The reasons are not far to seek. Greed, avarice and the tendency to subjugate others continue to be powerful human motivations, particularly in the LDCs. The developed countries appear to be reconciled to peaceful co-existence, yet they too maintain huge defence capabilities for the purpose of preventing the political and economic hegemony of one over the other. The development of instruments of massive destruction which can reach pin-pointed targets thousands of miles away by the push of a mere button should make war unimaginable, yet the dialogue on disarmament and arms reduction seems to get bogged down on such academic questions as the portfolio of weapons required to destroy this world several times over. The maintenance of the balance of nuclear terror appears to be the mainstay of the defence strategy of the Super Powers.

In the case of the LDCs the position is more pathetic. States whose inhabitants can ill-afford to enjoy even the minimal necessities of life spend billions either in preparing to attack their neighbour or in resisting aggression from their neighbour. A selected few of these throw morality to the winds and attempt to develop nuclear weapons along with the requisite delivery systems even though their per capita consumption of power is among the lowest in the world.

Turning to the specific case of Pakistan, an adequate defence deterrent is essential in the light of the vicissitudes characterising Pakistan's relations with two of its immediate neighbours, India and Afghanistan. Ever since the inception of the country Pakistan has been wary of the threat from these two countries. For the Indo-Pakistan subcontinent there would be no greater joy than the building up and strengthening of fraternal ties between Pakistan and India on the one side, and Pakistan and Afghanistan on the other. Till then, of course, Pakistan cannot lower its guard.

Fortunately, it was recognised in the early fifties that defence can only be supported on a strong economic base. The economic infrastructure and industrial and agricultural production provides a reliable base for supporting defence expenditure. It was genuinely believed that there is no point in economic development if you cannot defend what you develop, just as there is no point in defence if you have nothing worthwhile to defend. As a matter of fact many of the apparently non-Defence sectors are also of considerable importance to defence also. The expenditure on transportation and communication has a direct bearing on increasing the Defence capability. A network of roads provides for greater mobility and not only opens up the interior and brings the products closer to the market, but these links are of strategic importance during a war for they enable the troops to move speedily from one sector to another. Abundant rolling stock and a fleet of road transport vehicles not only move goods to domestic markets, or to the port for export, but are also needed in any emergency for movement of Defence goods or personnel at rates twice or thrice the normal requirements. A well-knit telecommunication system is essential to keep the field commanders in different areas close to each other. Even canals and embankments can be of strategic importance. Apart from the direct outlay on defence forces, the development process takes cognizance of defence requirements so that in any emergency the entire economy can be geared up to feed the Defence Services.

It has been said that "military strength is derived from economic strength and foreign policy is based on both. The essential contribution of economic strength is that it enables us to do more of the various things which are desirable from the point of view of national security, but which—in the fullest not even the wealthiest nation can afford.". The quantum of funds to be earmarked for Defence is essentially a political decision based on the willingness of the people to make sacrifices for defence. The Government has to decide the allocation for defence vis-a-vis competing demands for other purposes such as providing food, shelter and other concomitants of a fuller life.

The main problem is to evolve a national strategy which would secure the inviolability of the borders within the limitations of available resources. The military capability should be sufficient to successfully resist aggression for a period of at least six weeks; none of the LDCs can afford a war for longer than six weeks. Further the military capability should be such as to make aggression an intolerably painful and expensive affair for the aggressor. A potential aggressor should know that an unprovoked attack by it would result in instant retaliation with massive destruction well within its own territory; there should also be a real fear of a counter-attack at points in its soft under-belly and that the conflict might well result in its losing substantial slabs of territory. Pakistan can ill-afford a military capability of this type within its own resources. Heavy reliance will have to be placed on outside assistance from friendly countries. Pakistan's honeymoon with the Americans between 1954—65 secured for the country armour and combat aircraft which struck terror into those casting evil eyes on Pakistan's national sovereignty. This equipment has to be replaced with more sophisticated weaponry including combat aircraft, armour and missiles whose costs have reached astronomical figures. There is little point in maintaining large but ill-equipped armed forces. A small, combat ready and efficiently equipped force is a better alternative. This force needs to be backed up by a powerful missile strength by way of surface to surface missiles, surface to air missiles, and air to air missiles. If a war is to be fought the obvious preference should be to fight on territory other than one's own. This would require adequate bridging and engineering equipment. Collective security arrangements are also a necessity for Pakistan as long as the Indian threat continues; Afghanistan does not pose so serious a problem although an Afghan regime equipped with medium range missiles could pose a threat. It is important that the headquarters of the three services should draw up a coordinated programme based on the realities of life and should not reflect inter-service rivalries. The programme should be based on the study of various alternatives which should be presented to government so that the ultimate decision is made by civilian authority. The cost-benefit principle should be applied in all its force to defence expenditure so that the country secures a rupee's worth of defence capability for every rupee spent.

The defence of the country is dependent on the efficient operation of the three services, and in the ultimate analysis, on the will of the people to maintain their independence and sovereignty. In spite of the machinery for coordination the approach towards formulation of defence plans is individualistic and each service argues its case for allocation of funds with vehemence. The joint approach appears to be missing and the combined plan can be described as the 'stapling' together of the three services plans.

Another factor of which cognizance should be taken is that there is no machinery in the Ministry of Defence to advise on the most economic means of achieving military objectives. One does not come across a paper where different alternatives for the achievement of an objective have been discussed, the role of the Services analysed and any financial assessment made of the various alternatives that can be possibly adopted. Such machinery probably exist in service headquarters but the need for a multi-disciplined cell consisting of Defence Services officers, economists and accountants should be created to be able to advise the Government on the most economic investment for the achievement of a specified goal. To put the idea in clear terms, to hold the frontiers safe, do we need to match tank for tank or can we have a small number of tanks, a very large number of anti-tank weapons including missiles and a small number of striking aircraft, effective and efficient enough to prevent the enemy from getting near the borders? Can we possibly eliminate the need for a striking aircraft by having long-range artillery or guided missiles or rockets in very large numbers to prevent enemy tanks from crossing the borders? Various permutations and combinations are possible to achieve the object in view on the assumptions of the enemy strength and tactics, depending and the solution may involve all the three services.

These are some of the questions on which the experts and analysts have to think and advise the Government so as to secure the most efficient use of the funds for strengthening the defence of the country. It is also necessary that not only should the immediate (annual) requirements of the finance required for defence be known, but that the financial implications of the defence programme for at least 5 years ahead should also be known so that resources in terms of money,



men and material can be arranged. Above all, performance must be in accord with planning. There is just as much of public accountability in defence expenditure as in anything else. Perhaps a lot more.

## NON-DEVELOPMENT EXPENDITURE

The nature of the non-development expenditure (current and capital) of the Federal Government is indicated in Table 20.7.

TABLE 20.7  
*Non-Development Revenue and Capital Expenditure of Federal Government*  
(Million rupees)

	1973-74	1974-75
(i) Civil administration	824.1	1,279.4
(a) General administration	238.4	318.0
(b) Audit	46.0	55.1
(c) Police	128.2	229.1
(d) Frontier Regions	262.0	497.9
(e) Other administrative departments	26.9	38.0
(f) Foreign affairs	122.6	140.6
(ii) Social and Beneficent departments	393.0	295.6
(a) Scientific departments	135.8	111.7
(b) Education	39.8	60.9
(c) Medical & Public Health	49.0	65.4
(d) Agriculture, Fisheries & Industries	134.2	19.3
(e) Aviation	34.2	38.3
(iii) Defence	4,741.5	6,294.3
(iv) Debt Services	2,124.0	2,544.6
(v) Subsidies	2,185.4	3,081.8
(vi) Grants to provinces:	253.7	496.2
and grants to meet revenue deficit to N.W.F.P.	77.6	129.9
Baluchistan:	128.0	48.6
Others:	48.1	158.3
(vii) Other Expenditure:	370.5	549.2
Total Expenditure :	10,892.2	14,477.5

Source : Ministry of Finance.

The current expenditure of the Federal Government can be divided into consumption expenditure and transfer payments as shown in Table 20.8:—

TABLE 20.8  
*Current Expenditure of Federal Government*

	1973-74	1974-75 (Budget Estimate)	1974-75 (Revised Estimate)
(i) CONSUMPTION EXPENDITURE	5,895.7	7,236.0	8,290.6
(wages and salaries)	(699.4)	(752.7)	(819.6)
(commodities and services)	(660.9)	(991.6)	(1,484.7)
(defence expenditure)	(4,535.4)	(5,379.4)	(5,955.5)

(ii) TRANSFER PAYMENTS	4,872.0	4,082.0	6,647.4
(interest)	(1,539.0)	(1,617.2)	(1,896.3)
(subsidies)	(2,503.2)	(1,489.0)	(3,325.2)
(grants to provinces)	(331.0)	(564.4)	(874.5)
(other transfers)	(498.8)	(414.4)	(551.4)
Total	10,767.7	11,318.0	14,938.6

Source : Ministry of Finance.

The following interesting analysis emerges from Table 20.8:

- i) The revised figures for 1974-75 are higher by 32% as compared to budget estimates; in 1973-74 the revised estimates were even higher at 34.5%
- ii) The current expenditure in 1974-75 was 15% of GNP as against 13.8% in 1973-74.
- iii) Expenditure on subsidies increased from 2,503.2 million rupees in 1973-74 to 3,325.2 million rupees in 1974-75. During 1975-76 subsidies are estimated to be reduced to Rs. 1,597.5 million and under:

	(Million rupees)	
Item	1974-75	1975-76
Wheat	2,079	1,128
(Imported wheat)	(1,936.3)	(965.5)
(indigenous wheat)	(142.7)	(163.3)
Edible Oil	467.5	—
Oil refineries	255.5	252.5
PIA	116.1	85.0
Others	100	131.2

Subsidies by a poor LDC like Pakistan can hardly be justified save for very exceptional circumstances. The Pakistan International Airlines Corporation would qualify for this exception in view of the huge increase in the price of fuel and because PIA has to operate certain routes for socio-political considerations and also provide transport to certain areas at below cost levels. There can be no justification for subsidising oil refineries on the one hand and on the other hand imposing huge indirect taxes on petroleum products. The wheat subsidy is quite controversial. There is hardly any equity in providing subsidised wheat to the vocal urban areas and letting the rural areas (which are poorer in per capita incomes) fend for themselves and buy on the open market. The matter of fixation of a procurement price for wheat is discussed in the chapter on agriculture.

The traditional framework of the budget, which pre-dates modern macro-economic analysis, is essentially intended to ensure proper management of Government finances through the accountability of Government expenditure. Since the introduction of national income analysis and realization of the crucial role of fiscal operations in the determination of the level of national income, its distribution among various purposes such as consumption, capital formation etc., and different sectors and classes of the public and hence their use as an effective means of controlling overall economic activity, extensive improvements have been made both in the content and presentation of the conventional budgets. Since accountability continues to be the primary objective, their presentations do not conveniently yield information in regard to all the elements essential for determining the exact economic implications of Government transactions. They, therefore, have to be supplemented by new classifications. According to one of these classifications, Government transactions are recast in meaningful functional and economic categories so as to bring out

their economic significance. Specifically, this reclassification is intended to indicate Government expenditure on purchase of goods and services, both for current consumption and capital formation, transfer payments and changes in financial assets and liabilities towards the rest of the economy.

Different accounting systems are employed for the preparation of a budget which highlight particular aspects of Government transactions and are, therefore, of great importance for visualising their implications. Government transactions may be recorded either at the time of cash payment or when an obligation is incurred or when goods are delivered and services rendered.

The two basic systems are 'Cash' or 'Accrual'. In the case of the former, transactions are recorded when cash is paid out and its timing may be different from the actual delivery of the goods or rendering of service to Government. The flow of cash between Government and the rest of the economy can, thus, differ significantly from the use of real resources by Government and their availability to the rest of the economy.

In Pakistan, the budget is essentially based on the 'Cash' accounting system. As a result, the main emphasis is, besides proper accounting of expenditure according to the authorization, on the use of cash particularly in regard to the expenditure side. Within this framework sometimes transactions are taken on a gross basis, even though the net position could do and would have been, in fact, more meaningful, with a view to ensuring proper control on both receipts and expenditure all along the year. In certain cases where the cash position of the Government is not likely to be affected, even though the use of real resources may be fully involved. The expenditure is reduced by recoveries or other accounting adjustments.

The total expenditure of the Federal Government is indicated in Table 20.9:

TABLE 20.9

*Total Expenditure of Federal Government*

HEAD	(Million Rupees)			
	1973-74		1974-75	
	Amount	% of total	Amount	% of total
(1) Final outlay:				
(a) Consumption Expenditure	5,895.7	37.9	8,920.6	32.5
(b) Gross Capital Formation	1,252.8	8.0	3,086.8	12.1
Sub-Total:	7,418.5	47.7	11,377.4	44.6
(2) Other Capital Expenditure	2.9	—	5.1	—
(3) Transfer payments:				
(a) Current	4,872.0	31.3	6,647.4	26.0
(b) Capital	11.6	—	7.5	—
Sub-Total:	4,886.5	31.4	6,654.9	26.1
(4) Financial Investment and Loans (Net)	3,244.3	20.8	7,455.7	29.2
Total:	15,549.3		25,493.1	

Source : Ministry of Finance.

Table 20.9 illustrates the expenditure of the Federal Government on current consumption, gross capital formation, other capital expenditure, transfer payments on current and capital account, and financial investment and loans (net).

Table 20.10 spells out the details of capital formation by the Federal Government.

**TABLE 20.10**  
*Capital Formation by Federal Government*

HEAD	(Million Rupees)	
	1973-74	1974-75
(i) Gross Fixed Capital Formation	1,761.3	2,770.9
(a) (Construction)	(1,455.6)	(1,936.9)
(b) (Machinery)	(282.5)	(760.4)
(c) (Other Capital Formation)	(23.2)	(73.6)
(ii) Inventories	(—) 508.4	315.9
Total:	1,252.9	3,086.8

*Source:* Ministry of Finance.

The net loans (that is loans extended less repayments on earlier loans) advanced by the Federal Government to various agencies are spelt out in Table 20.11.

**TABLE 20.11**  
*Net Loans by Federal Government*

HEAD	(Million Rupees)	
	1973-74	1974-75
(i) Provincial Governments	1,698.9	2,490.0
(ii) Autonomous Bodies	71.7	393.2
(a) Financial Institutions	8.3	93.8
(b) Non-Financial Institutions	63.4	299.4
(iii) Federal Organisations	675.8	2,547.2
(iv) Local Authorities	47.4	6.9
(v) Individuals	5.8	15.7
Total:	2,499.6	5,453.0

*Source:* Ministry of Finance.

Table 20.11 indicates that in 1974-75 the net loans advanced by the Federal Government increased by a horrific 126.4% as compared to 1973-74. This would show increasing dependence of the Provincial Governments, autonomous bodies, Federal organisations and local bodies on Federal loan financing.

An appreciation of public expenditure would not be complete without taking into account the expenditures of the Provincial Governments, particularly in view of the extent of provincial autonomy given them in the Pakistan Constitution. Table 20.12 indicates in some detail the expenditures of the four provinces.

**TABLE 20.12**  
*Provincial Expenditure during 1974-75*

(Million rupees)				
	Punjab	Sind	N.W.F.P.	Baluchistan
<b>(1) Expenditure met from Revenue</b>				
(a) Direct demand on Revenue	42.9	23.1	8.1	3.7
(b) Irrigation (excluding interest)	284.8	81.4	18.1	12.6
(c) Debt Services (inclusive of interest on capital outlay of commercial departments)	185.9	86.7	40.8	35.3
<b>(2) Civil Administration Expenditure met from revenue</b>	260.4	174.9	83.0	62.2
(a) General administration	70.3	37.8	19.5	22.1
(b) Police	133.3	107.8	39.8	34.2
(c) Frontier regions	—	—	12.9	—
(d) Other heads	56.8	29.3	10.8	5.9
<b>(3) Beneficent departments Expenditure met from revenues</b>	1,053.5	447.7	192.6	157.6
(a) Education	557.1	293.8	106.4	52.7
(b) Health Services	111.5	45.8	26.0	21.2
(c) Agriculture	82.1	18.5	11.6	14.3
(d) Veterinary	22.2	4.8	3.6	5.2
(e) Industries	15.0	2.4	0.9	2.9
(f) Civil works & misc. public improvement	120.0	38.5	16.6	52.6
(g) Other heads	145.6	43.9	27.5	0.8
(h) Miscellaneous	153.7	88.6	88.8	61.8
<b>(4) Development Expenditure met from Revenue</b>	511.1	108.2	143.7	380.4
<b>(5) Less—Operational Shortfall in Development Expenditure</b>	(—)61.3	—	(—)17.9	—
Total Expenditure met from Revenue	2,034.0	985.4	381.7	316.2
<b>(6) Development Expenditure on development from Capital Account</b>	757.1	341.4	217.4	192.1
<b>(7) Loans</b>	101.7	68.6	97.7	—
<b>(8) Non-development Expenditure met from Capital Account</b>	114.7	104.5	70.2	—
<b>(9) Capital Expenditure</b>	866.5	514.5	345.6	207.0
Total Expenditure met from Revenue and Capital Account	2,900.5	1,499.4	727.3	523.2
<b>GRAND TOTAL OF ALL FOUR PROVINCES:</b>	<u>5,650.4</u>			

*Source: Ministry of Finance.*

The total expenditure of the four provinces adds up to 5,650.4 million rupees in 1974-75 of which Punjab accounted for 51.3%, Sind for 26.5%, NWFP for 12.9% and Baluchistan for 9.3%. Expenditure of the four provinces is only 22% of the total Federal expenditure. Thus in Pakistan Federal expenditure is the dominant force in public expenditure.

The Economic *cum* Functional classification of Federal expenditure is more meaningful in terms of economic analysis. The expenditure has been reclassified into five functional categories with another category for unallocable expenditure. They consist of general services, community services, social services, economic services, commercial departments and unallocable. General services, which include defence expenditure used to be the major claimant of the expenditure. The situation has, however, changed recently as the unallocable expenditure has surpassed general services. In 1974-75, the expenditure to be shown as unallocable was Rs. 10,785.2 million representing 42 percent of the total expenditure as compared with 31 percent of the expenditure going to general services. Table 20.13 summarises the functional classification of the Federal Government's expenditure while Table 20.14 gives the details of each of the functional classifications.

TABLE 20.13

*Functional Classification of Federal Expenditure*

Head	(Million Rupees)			
	1973-74		1974-75	
	Amount	% of total	Amount	% of total
General Services	5,645.1	36.9	7,998.5	31.3
Community Services	188.3	1.2	212.9	0.8
Social Services	599.7	3.9	932.6	0.4
Economic Services	2,600.7	17.0	4,352.0	17.1
Commercial Departments	424.4	2.7	1,216.6	4.7
Unallocable	5,827.3	38.1	10,785.2	42.2
<b>TOTAL</b>	<b>15,285.5</b>		<b>25,497.8</b>	

Source: Ministry of Finance.

TABLE 20.14

*Detailed Functional Classification of Federal Expenditure, 1974-75*

Functional Classification		(Million Rupees)		
		Current Expenditure	Capital Expenditure	Total Expenditure
(A)	General Services	7,755.1	243.4	7,998.5
(i)	General Administration	1,094.3	120.0	1,214.3
	(a) Organs of state	209.6	92.3	301.9
	(b) Foreign Affairs	204.0	11.9	215.9
	(c) Fiscal Management	436.9	3.5	440.4
	(d) Economic Regulation	164.7	3.0	167.7
	(e) Others	79.1	9.3	88.4
(ii)	Defence	5,955.5	—	5,955.5
(iii)	Law & Order	705.3	123.4	828.7
(B)	Community Services	195.9	17.0	212.9
	(a) Administration	46.2	—	46.2
	(b) Roads and Highways	—	—	—
	(c) Scientific & General Research	70.9	16.8	87.7
	(d) Other Community Services	78.8	0.2	79.0
		857.0	75.6	932.6

(C)	Social Services			
(a)	Administration	233.6	0.3	233.9
(b)	Education	98.0	1.0	99.0
(i)	General	63.2	—	63.2
(ii)	Medical	10.2	—	10.2
(iii)	Agriculture	—	—	—
(iv)	Others	24.5	1.0	25.5
(c)	Health	159.0	4.9	163.9
(d)	Population Planning	145.1	—	145.1
(e)	Manpower Management	41.5	—	41.5
(f)	Social Security and Welfare Measures	13.5	1.0	14.5
(g)	Others	166.3	68.4	234.7
(D)	Economic Services	1,113.8	2,388.2	4,352.0
(a)	Administration	10.9	0.3	11.2
(b)	Agriculture	483.3	8.8	492.1
(c)	Industries	46.3	724.7	771.0
(d)	Irrigation	17.3	1,158.4	1,175.7
(e)	Fuel and Power	262.1	467.8	729.9
(f)	Multipurpose Dams	—	—	—
(g)	Mineral resources	1.4	8.8	10.2
(h)	Manufacturing and Construction	41.3	471.2	512.2
(i)	Transport and Communication	191.2	396.5	587.7
(j)	Rural Development	49.1	0.1	49.2
(k)	Tourism	10.9	1.6	12.5
(l)	Others	—	—	—
(E)	Commercial Departments	—	1,216.6	1,216.6
(i)	Post Office	—	8.4	8.4
(ii)	Telegraph and Telephone	—	596.8	596.8
(iii)	Railways	—	611.4	611.4
(iv)	Islamabad Milk Plant	—	—	—
(F)	Unallocable	5,016.1	5,759.0	10,785.1
(i)	State Trading	—	315.9	315.9
(ii)	Consumer Subsidies	2,546.7	—	2,546.7
(iii)	Debt Services	1,896.3	—	1,896.3
(i)	Domestic Debt	860.5	—	860.5
(ii)	Foreign Debt	1,035.8	—	1,035.8
(iii)	Loans & Advances	—	5,452.9	5,452.9
(iv)	General Grant to Provinces	503.9	0.2	504.1
(v)	Other Grants	—	—	—
(vi)	Other Expenditure	69.2	—	69.2
		<hr/> 14,938.0	<hr/> 10,559.8	<hr/> 25,497.8

Source: Ministry of Finance.

Statistics on the further break-up of each of the items listed in Table 20.14 are available in Account VII of the Federal Government and provide a more detailed insight into the composition of these expenditures. For example during 1974-75 the expenditure on federal wages and salaries paid out of current account was 81,960 million rupees, on transport and communications 114.4 million rupees, on utilities 7 million rupees, on stationery and printing 38.4 million rupees, and on rent 34.7 million rupees.

## Fiscal Policy

Fiscal policy should not be construed to imply the stapling together of policies relating to the main constituents of public finance, namely, taxation, national debt and public expenditures. In fact all these constituents of public finance should be influenced by fiscal policy and should be used in a coordinated manner as instruments of fiscal policy.

Fiscal policy, broadly defined, is almost as extensive as statecraft and could well envelope policies relating to money and banking, foreign trade, and investment in general. There is indeed a very close affinity between fiscal policy and monetary policy and an orderly economic arrangement requires that the monetary policy should actively support fiscal policy.

Fiscal policy alone cannot bear the burden of pursuing economic stability nor can it be the sole factor for stimulating economic growth. Both inflation and deflation need to be tackled by policies other than fiscal policy alone, such as those affecting production and international trade. Nevertheless fiscal policy is the most powerful weapon in the armoury of a nation for directing its economic objectives. Fiscal policy, in short, gears up all the elements which make up public finance to progress the objectives of economic policy.

In a federal system of government problems inter-governmental fiscal relations are inevitable. Provincial and local governments are expected to provide public services, many of which have an extra-local character, as, for example, power and gas in Pakistan. A larger governmental unit, like the Federal Government, would be more efficient in collecting many taxes, while smaller units may be in a better position to effectively provide many governmental functions. There would, therefore, be greater efficiency in the use of resources if each unit of government is not required to rely exclusively on local sources of revenue which mostly have a restricted base. Federal fiscal aids would help to eliminate the use of taxes which reduce consumer welfare more than would other taxes yielding the same revenue. Since governmental tax and expenditure policies affect the level of employment in the private economy it is most desirable to coordinate the fiscal activities of the constituent units. It may well happen, as has been the case in several countries, that the fiscal policies of provincial and local governments offset the effects of federal fiscal policy. Again, an important objective of federal and provincial assistance should be to raise the level of services performed by the smaller units of government. Inter-governmental transfers of income are one way by which the richer areas may invest in the poorer areas to the ultimate benefit of both. Federal and provincial assistance should require some minimum local participation with a view to discouraging waste and extravagance.

Since **deficit financing** is a major instrument of fiscal policy, it is necessary to understand this concept. Deficit financing is generally identified with budgetary deficits but difficulties arise because of the different connotations given to the budgetary deficits. In some countries, budget deficits are taken to mean deficits on current (or revenue) account (as in the U.K.); in others, represent the excess of total budget expenditure (both on capital and current accounts) over total budget receipts (as in the U.S.A.). In the post-Keynesian era, these budget deficits have come to be analysed with respect to the inflationary or deflationary impact of a change in the public debt (defined to include the change in government cash balances). In India expenditure financed by borrowing from the public is excluded from the measurement of deficit; and a deficit so defined can be financed in one or more of the following ways: (a) borrowing from the Central Bank; (b) withdrawal of cash balances; (c) borrowing from the commercial banks; and (d) issue of new currency by the government.

The Ministry of Finance claims that in Pakistan the level of deficit financing was Rs. 1,930 million in 1972-73, Rs. 860 million in 1973-74, and Rs. 790 million in 1974-75 (upto the end of April). This calculation of deficit financing excludes borrowing from commercial banks and the public, and is restricted to borrowing from the State Bank of Pakistan, running down of cash balances and issue of new currency. This concept is not valid as it does not cover borrowings from commercial banks which are not really genuine savings inasmuch as commercial banks are in a position to increase monetary assets. Besides it is difficult to record borrowings by government according to the type of lender, as ownership of the national debt does not always remain with the same institutions that initially bought it.



The objectives and limitations of deficit financing have already been discussed in the section on national debt. Suffice it is to say here that the desperate need for financial resources in under-developed countries struggling to break the vicious chains of poverty and under-development must be appreciated, and attempts of the governments to use all available means to mobilize real resources for development should be considered in a sympathetic light. The practical question is whether, and under what circumstances, is the monetary expansion a suitable instrument for raising these resources. The decision of the policy-maker in this regard is always a difficult one.

## REVOLUTIONARY CHANGE

The theory of fiscal policy has undergone a revolutionary change as a result of the impact of the Keynesian theory of employment and income. The earlier objectives of fiscal policy to avoid deficits and interference with the economy have yielded place to the objective of promoting stability. The modern objective of fiscal policy in the developed countries is to promote growth with stability. Owing to its western orientation fiscal policy is primarily directed towards the problem of maintaining full employment in the face of reduced effective demand (which is associated with recessionary and deflationary periods). Hence the advocacy of deficit financing for curbing unemployment in industrialised countries during a recession. In the under-developed countries there is little or no excess industrial capacity, agriculture is the dominant economic sector, capital investment per capita is low, it is difficult to increase the availability of capital equipment rapidly a substantial part of the output is consumed by the producers directly without entering the market and the supply of agricultural products is relatively inelastic. In these circumstances an increase in investment will not have the same effects on income and employment as in the industrialised countries. This is so because consumption goods industries cannot readily respond to the substantial increase in demand (the proportional increase in demands in the LDCs would be higher than in the industrialised countries owing to the former's higher propensity to consume), and additional employment would thus not be generated. The inflationary pressure on prices will be strengthened by the increase in agricultural incomes and an increase in their consumption of food and non-food items. To the extent that the marketable surplus of food is reduced, the prices of food items will shoot up. In the LDCs the multiplier effect is by and large confined to increasing money incomes rather than providing additional employment or additional real income. Thus the critical difference between the LDCs and the industrialised countries lies in the fact that, while the latter have to activate unutilised resources, the former cannot assume the existence of unutilised resources except those of unskilled and indisciplined labour. Besides a compensatory fiscal always tends to increase imports and direct a part of the potential exports to the domestic market; this implies a balance of payments deficit which only those with substantial foreign exchange reserves can afford.

In the LDCs an increase in taxation and reduction in public expenditure (surplus budgeting) can be relatively more effective in curbing a boom; a policy of deficit financing cannot be half as effective in promoting economic growth.

It is apparent that a realistic fiscal policy should be in accord with the economic conditions existing in the country and the objectives which are sought to be achieved. Walter Heller has rightly pointed out: "The apparent similarity in goals should not lead us to overlook the vast differences in economic conditions, in the legal and political environment within which fiscal policy has to be formulated, and in administrative capabilities. Such differences may require, first, that different policies be pursued even if the ultimate objectives are the same. Second, the ordering of priorities among the objectives may have to be significantly different. Broadly speaking it may be said that whereas the maintenance of stability will be assigned first priority in an advanced economy like the United States, capital accumulation would have to be assigned first priority in an under-developed economy like India."

The key to the problem of economic growth in the LDCs is capital accumulation. On account of the low ratio of savings to GNP, governments in all LDCs have to play a key role in promoting capital growth and here fiscal policy should play a crucial role. A higher ratio of savings to national income was achieved in Communist States as also in the heyday of capitalism

by deliberately keeping down the level of consumption. In a democratic system this is more difficult to achieve and the process of development is, therefore, longer. The savings (and therefore the sacrifices) involved in capital formation have to be equitably distributed amongst all classes. The incremental saving ratio (ratio of savings to additions in income) is one of the critical determinants of growth and here public finance assumed a new significance.

The implementation of any developmental plan would have to rely substantially on sound fiscal and monetary measures; if the fiscal policies required for the implementation of a plan are politically undesirable or economically unfeasible, then it is the plan which has to be modified and not fiscal policy.

Professor W.A. Lewis lists three requirements of economic growth; the effort to economise, the accumulation of knowledge and its application, and the accumulation of capital. While all three requirements are important, the accumulation of capital is basic. The most important assignment of fiscal policy is to convert savings in the national economy from 5 to 12% per annum, and, as Professor Lewis put it, "No nation is so poor that it could not save 12% of its income if it wanted to; poverty has never prevented nations from launching upon wars, or from wasting their substance in other ways."

Fiscal policy has also the important role of determining the pattern of investment by encouraging some forms of investment and discouraging others so as to be in accord with priorities laid down in the National Plan. Much of direct public sector investment will be in social overhead capital, which, while raising the marginal productivity of private investment, is not itself directly productive (except in cases such as power). It is, therefore, all the more necessary to direct private investment into the most directly productive projects.

In under-developed countries fiscal policy should be mainly directed towards increasing capital accumulation as rapidly as possible by raising the ratio of savings to GNP and increasing the incremental saving ratio at an accelerated pace. In this context Lerner's concept of a functional finance should be construed to imply the function of capital accumulation. The effects of taxation, national debt and public expenditure have already been discussed in all their aspects and so has the relationship between economic growth in under-developed countries and fiscal policy; it should not, therefore, be all that sophisticated to enunciate the leading principles of fiscal policy, as follows:—

- (i) Fiscal policy must be coordinated with other aspects of economic policy (it can also be the other way round), and particularly with monetary policy.
- (ii) Fiscal policy should restrain consumption and thus make available additional resources for development.
- (iii) Fiscal policy should arrange an orderly transfer of resources from the private to the public sector for meeting current requirements as also for investment. This should be done without adversely affecting the desire or the ability to work, save and invest.
- (iv) Fiscal policy should direct the pattern of investment into the most social by and economically desirable channels.
- (v) Fiscal policy should ultimately aim at the establishment of an egalitarian society. This should be an unobstructive process over a period of years and should, by no means, put a premium on work, saving and investment.
- (vi) Fiscal policy should be aimed at increasing the desire and the ability to work, save and invest.

Fiscal policy has been, by and large, formulated and implemented in a wise and judicious manner in Pakistan during the past 28 years. The institution of the Finance Minister is a powerful institution and four Finance Ministers have left the imprint of their personality on the Pakistan scene, for better or worse. The late Ghulam Mohammad was the first Finance Minister of Pakistan; he firmly upheld the old tradition of orthodox and disciplined finance. Budget procedures and financial regulations were strictly enforced and woe betide the Minister who demanded supplementary grants or an exemption from some financial regulation. He would probably have gone down in history as one of the really great men who helped put this country on an even keel, were it not for his very grave indiscretion of playing around with the constitution and destroying democracy. To Choudhry Mohammad Ali, who served with great distinction as Secretary General,

then Finance Minister and later as Prime Minister goes the credit for formulating and implementing a fiscal policy which was development-oriented and which successfully catered to the requirements of Defence and Development. Choudhry Mohammad Ali will also be remembered for piloting the 1956 Constitution which guaranteed fundamental rights and made them justiciable, as also for his role in establishing a One Unit provincial administration in West Pakistan.

With Finance Minister M. Shoaib, who took over in 1958, began the ascendancy of the Ministry of Finance in all aspects of public administration. He gave the country a sound economic leadership and the economic progress (combined with stability) which was witnessed in the sixties is a tribute to the then prevailing fiscal and monetary policies. In March, 1969 when Gen. Yahya Khan forced his way into the Presidency, the stage was set for the obliteration of all values, particularly those concerning financial discipline. When Prime Minister (then President) Bhutto took over the reins of government in December, 1971, he was so engrossed with political and constitutional affairs and with the urgent problem of obtaining the release of 90,000 prisoners of war and the return of 4,000 square miles of territory by India that he left the Ministry of Finance, Planning and Economic Coordination to the tender mercies of an avowed Marxist, Dr. Mubashir Hasan.

The tone of fiscal policy was set at Dr. Mubashir's first press conference. When asked what he would do if the business community did not cooperate with him he replied firmly and without sarcasm: "Then we will hang them." He had impeached the industrialized West at Turtle Bay; he took oppressive and repressive measures against the business and industrial community in his own country. Business confidence was shaken completely and many a successful entrepreneur bade a final good-bye to the country where he had prospered and to whose prosperity he had contributed in no small measure. There was an unprecedented flight of capital. Dr. Mubashir Hasan's practice and policies were cold and calculated acts, the intention seemed to be to inflict such irreparable damage to the economy that people would throw up their hands up in despair and be compelled to opt out for some form of Leninism. But God had willed otherwise.

In 1974, Prime Minister Bhutto gracefully eased out Dr. Mubashir Hasan. Since then fiscal policy has again been put back on the rails. Secretary General A. G. N. Kazi of the Ministry of Finance appears to have been a stabilising influence. In mid-1975 it is rather refreshing to hear Finance Minister Rana Haneef lecturing once again in a rational and objective manner: "The Government is fighting a battle along with other developing countries for the introduction of a new international economic order which will remove or at least reduce the pressure of international factors. We have to devote ourselves in the longer run to achieving a favourable balance of payments position. . . . the essential elements of the development strategy were growth with equity, protection of consumer interests, incentives to producers, regional justice and strengthening of over-all economic and technological base." It would be reasonable to assume that fiscal policy in Pakistan would now be sound, pragmatic, and savings and investment oriented, and that the nightmare which the country went through between 1969—74 would in retrospect be a bad dream best consigned to the dustbins of history.



## Agriculture

Agriculture is the largest single sector of Pakistan's economy as it contributes about 36 per cent to the Gross Domestic Product, accounts for about 40 per cent of export earnings and employs more than 50 per cent of its civilian labour force, besides meeting the raw materials requirements of most of the industries. Agriculture is and will, therefore, continue to be the mainstay of the national economy for many years.

The total area of the country is 198 million acres, of which only 75 million acres or about 38 per cent can be used for cultivation but only 4.8 crore acres or 24 per cent is currently cultivated. Of the cultivated area, two-thirds is irrigated and one-third depends on rains. Of the irrigated area about 73 per cent is irrigated by canals and the remainder by tube-wells, wells, etc.

The basic objective of Government's policy in the field of agriculture is to increase production and to ensure that the benefits flowing from it reach the mass of the peasantry. In pursuance of this objective the Government has provided various incentives to farmers such as the provision of fertilizers at subsidized rates, better availability of water, installation of public tube-wells, distribution of improved varieties of seeds and pesticides and provision of credit and a network of extension services. The support procurement prices of wheat, rice and sugar-cane have been revised upwards to enable the farmers to get the full return from their produce.

As a result of the various measures taken by the Government, agricultural production was expected to increase by 7.5 per cent during 1973-74 but due to serious damage to the standing Kharif crops by floods in the Punjab and Sind, the target had to be revised downward. The floods of August-September 1973 damaged about 655,000 acres of cotton, 309,000 acres of rice, 118,000 acres of sugarcane, 546,000 acres of fodder and 83,000 acres of maize.

### Agricultural Economics

The agricultural sector of the economy is just as susceptible to economic analysis as any other sector, for, as Lord Keynes pointed out, "The Theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions." Analyses of demand and supply, value and price, and the distribution of national income are perfectly valid in their application to agriculture.

It can be said that Agricultural Economics is simply the theory and principles of economics as applied to agriculture. But the specific parts of this broad field enumerated below are closely related to economic development.

**Production Economics.**—This part of the field is concerned primarily with the allocation and utilization of resources in the production of agricultural commodities. It can be considered from the standpoint of the individual producer, of a village or group of villages, of a Province, or of the entire nation. From the standpoint of the individual producer the Economics of Production is concerned with questions such as: How can the resources available to him (land and water, labour, capital) be allocated (used) to produce the optimum return from their combined utilization? What crops and how much of each, what livestock and how many, will yield the highest income? How much would additions of specified amounts of one or all the factors of production increase the net return to the cultivator?

When considering the Economics of Agricultural Production from the standpoint of the entire nation, two central problems to be examined are: (1) The allocation of resources (land and water, labour, capital, etc.) to the production of different commodities which will produce the maximum economic return to the agricultural sector of the economy, and (2) the effect on the national economy of increases or decreases in the proportions of the total national resources used in agriculture.

Theoretically, in a free enterprise system the allocation of resources which will produce the

maximum economic return to agriculture is also the allocation which will maximise the contribution of agriculture to the total economy.

**Economics of Land and Water utilisation.**—Strictly speaking, this might be considered as one phase of Production Economics. But in countries such as Pakistan, the rate of economic development in agriculture and the cost of development are influenced markedly by the ways in which agricultural land is used, by additional land being brought under the plough, and the ways in which water is utilized. The economics of additional water from rivers and wells is important. Existing land tenure arrangements and the economic results of changes therein is another problem worthy of the attention of Agricultural Economists.

**Agricultural Credit.**—The use of credit in agriculture, the economic returns that would result from increased inputs of capital, the credit institutions, the sources of funds, and the cost of credit all affect directly or indirectly the volume of agricultural output of individual units and the income of individual cultivators as well as the agricultural output and the agricultural income of the nation as a whole. Thus, this phase of Agricultural Economics is intimately associated with economic development.

**Marketing.**—The efficiency of the marketing system for agricultural commodities is determined by innumerable factors. The difference between the price the producer receives for what he sells and that which the manufacturer or consumer pays is a problem in which Agricultural Economists in most countries have a lively interest. The efficiency of existing marketing institutions is an important factor in agriculture.

**Prices.**—Agricultural Economists devote much thought and study to the factors which determine the prices of agricultural products at each step in the marketing process. To simply say, as theorists do, that in a free market prices are determined by supply and demand is not satisfying. Prices are, of course, one of the principal determinants of agricultural income. Good prices are an incentive for increases in production and low prices for a commodity influence producers to curtail its production in favour of some other commodity. Thus prices also are closely related to the Economic Development of Agriculture.

The foregoing is by no means an exhaustive list of specific subjects in the broad field of Agricultural Economics which have a bearing on economic development of the agriculture of a nation, but it should suffice to show that many of the problems within this general field are also problems intimately associated with the economic development of agriculture.

The following characteristics are peculiar to the agricultural economy:—

- i) Quite a few agricultural commodities are joint products because they are part of the same plant or animal (mutton and wool, milk and beef, cotton and vegetable oil, etc.). It is difficult to allocate costs as between these joint products.
- ii) Agriculture requires a huge proportion of land as compared to the other factors of production. This has to be so because agriculture requires energy for plant growth and this, in turn, is provided by sunlight. Agriculture would always require large areas of the earth's surface on which sunlight falls since plants are the primary factors of agriculture.
- iii) Small-size farming units restrict the scope for the employment of labour and, therefore, for increase in productivity and production.
- iv) Weather and biological factors, which a farmer cannot fully control, have a significant influence on production. The timing of agricultural operations has also to be adjusted to weather conditions. The time factor in plant and animal growth favours diversification of agriculture.
- v) The demand and supply of agriculture products is relatively inelastic, and the response particularly of supply to price changes is rather slow.
- vi) The agricultural labour force is grossly under-utilised and this poses an extremely serious, economic, social and political problem. Quite a substantial part of the rural population does not work, and those who do work do so for only short periods. As Gunnar Myrdal has so ably argued in "Asian Drama":—

"These behaviour patterns are deeply rooted in attitudes that, deriving strength from the institutional framework of society, have hardened into mores. Institu-

tions and attitudes are interdependent and mutually supporting, and both are the result of a long historical process that has drained agriculture—outside of the plantations and a few market-oriented sub-sectors—of much of its vitality. Even if industrialization proceeds at the most rapid rate practically possible, large-scale industry will not be able to employ much additional labour for decades to come. Indeed, because of the backwash effects in traditional industry, industrialization may even for a considerable time decrease the number of workers employed in manufacturing as a whole. Small-scale industry may, in some countries, have more of a chance to grow, but while it is becoming modernized—which is a pre-condition for its growth—its ability to expand its labour force will not differ much from that of large-scale industry. Some small-scale enterprises may be located in rural areas and give employment to workers living there; but in the main these enterprises will, of necessity, opt for an urban environment.

"In evaluating the employment potential of the cottage industry in the villages, we must take into account not only the competitive threat posed by modern, small-scale and large-scale industries, which in the somewhat longer run will intensify in spite of protection, but also the labour-saving effects of the gradual modernization that cottage industry itself must undergo if it is to survive. On this basis it seems unlikely that the cottage industry, even if protected and supported, will offer many new employment opportunities. Instead, the agricultural section of the rural economy will have to continue to accommodate those craftsmen who are no longer able to make a living at their old trade.

"Meanwhile, of course, migration from rural to urban areas will continue, but the rural population is so large that it will not decline greatly during the next twenty or thirty years as a result of this movement. Furthermore, as few migrants will be able to find employment in urban industry or construction, most of them will enter open occupations like services and retail trade where labour is just as under-utilised as in agriculture. From a planning point of view, speeding up migration from rural areas is not a desirable means of reducing the under-utilisation of the agricultural labour force.

"For millions of persons born in rural districts there is no escape from an agriculture career.... agriculture starts with too many conditions; neither selection nor rejection is possible, for where would the rejected go?"

- vii) Most farm operators and farm labour are required to have a wider variety of skills than factory labour.
- viii) A progressive agriculture requires change and invigoration since the science of plant breeding is making significant and frequent advances. Again, each change in farming practice calls for additional changes in the cropping pattern, application of fertilizers, use of water, etc.
- ix) Agriculture, apart from being a means of sustenance, is a way of life in which sentimental and sociological considerations influence its organisation. Cooperation with the community, acceptance by the community, and adherence to community values is just as powerful a force today as it was at the turn of the 19th Century.
- x) A substantial part of agricultural production (food items) does not enter the market economy and is consumed directly. Even a significant part of the increase in agricultural production (food items) is consumed directly because, to begin with, nutritional standards in the villages are low.
- xi) The demand for and prices of agricultural products are subject to severe fluctuations emanating for reasons outside national frontiers. This makes for serious instability and a downward swing in demand and prices causes grave distress to the rural masses.
- xii) Work practices are rather poor and do not make use even of the traditional practices. As early as 1889 Voelcker reporting on the improvement of Indian Agriculture remarked:

"...the conviction has forced itself upon me that, taking everything together, and more especially considering the conditions under which Indian crops are

grown, they are wonderfully good. At his best the Indian raiyat or cultivator is quite as good as, and, in some respects, the superior of, the average British farmer, whilst at his worst it can only be said that this state is brought about largely by an absence of facilities for improvement which is probably unequalled in any other country, and that the raiyat will struggle on patiently and uncomplainingly in the face of difficulties in a way that no one else would." In 1975 the attitude of farm labour, has, if any, deteriorated in comparison to what Voelcker reported in 1889. Myrdal has rightly concluded that without any innovation and even without any investment other than longer and more efficient work, agricultural yields could be increased very substantially.

## Agricultural Planning

In the under-developed countries over 60 per cent of the population is dependent on agriculture and the greater part of the gross national product owes its origin to agriculture. In virtually all these countries, agriculture would clearly be called on to grow more food (and also somewhat more diversified foods) for domestic consumption, to produce more raw materials for domestic industry and to make the maximum contribution towards an increase in export earnings. If these things could not be done at a time when countries were attempting to accelerate economic development, there would inevitably be serious consequences, in particular, a sharp rise in the cost of living, a strain or increased pressure on the balance of payments, a slowing down of the rate of industrial development, or a combination of several of these evils. This clearly points out the need for increased productivity. At the same time as agriculture was being called on to produce substantially more, it would necessarily be competing for scarce capital with sectors of the economy such as transport which obviously, although indirectly, benefit rural area and support agriculture, and also with a rapidly growing manufacturing sector. On the other hand, the manufacturing industry would in fact be helping agriculture, both by providing agricultural requisites such as machinery and fertilizers and also by making available a wider range of consumer goods to rural families. Finally, underlying all these changes, there was a gradual merging of agriculture with the money economy after centuries of life largely founded on a subsistence basis.

Agricultural planning should be based on increasing production and productivity in this sector. It must take into account the food requirements of a growing population with added purchasing power (hopefully) based on rising income, reduction in dependence on food imports, diversification of agriculture for lessening expenditure on a few crops, raw material requirements for domestic industry, increased agricultural production for larger export earnings (not only for balance of payments purposes but also to finance economic development), requirements of basic agricultural inputs, and last, but by no means the least, the basic problem of utilising rural labour. It is very necessary to increase the utilisation of the currently under-utilised labour, a problem which will tend to get worse with the increase in population.

Most plans for agricultural development take the form of a comprehensive programme of public development expenditure in the agricultural sector, more or less closely integrated with overall economic needs. Plans for public investment in agriculture usually relate to crop production, animal husbandry, forestry and fisheries. The highest proportion of investment is generally allocated to crop production. The programmes of implementation include:

- (a) Measures aimed at directly increasing production—irrigation, land development and reclamation, use of fertilizers, pest and disease control;
- (b) Measures to provide services as aids to production or to future planning—extension, community development, basic surveys and research;
- (c) Measures to provide incentives to producers—price policies, subsidies, tax concessions;
- (d) Measures to promote institutional changes necessary for sustained efficient production—agrarian reforms, credit and marketing facilities.

Planning for the expansion of agriculture along the most economic lines calls for forward estimates of the effective demand for the principal agricultural products, both in the domestic and international markets. These estimates can also be of value in achieving a balance between



the growth of industry and that of agriculture.

Although it is often possible, if adequate background statistics are available, to make reasonably accurate estimates of domestic demand and supply for important foodstuffs for periods up to one year, projections for longer periods are liable to large margins of error. This is particularly the case for forward estimates of foreign markets.

However, even imperfect indications of future trends are of value in the formulation of economic development plans and policies for agriculture. Indeed, they are essential for building up a comprehensive picture of the whole economy. These indications can also be of assistance in giving some advance notice of "land-mines" on the road of economic development, such as supply shortages, inflationary pressures or the emergence of surplus situations. Difficulties in forecasting have in the past been one factor necessitating frequent and extensive revision of development plans.

In evaluations of the demand outlook of foodstuffs for domestic consumption, the most important factors influencing effective demand are population trends and changes in income per person. Not only changes in total numbers, but also changes in the composition of the population with respect to e.g., age, sex, occupation, and the rural-urban ratio, influence effective demand.

Changes in income per person are especially important in Asia, where most of the family income is spent on food. The future consumption pattern will also be conditioned by income distribution and by consumption trends, including the income and price elasticities of the different commodities. For instance the income elasticity of demand for sugar in the rural areas is very high and the demand for sugar increases by leaps and bounds in periods of rural prosperity. Changes in available supplies, with consequent effects on the relative price levels of different commodities, and of food stuffs generally in relation to non-food products, may also play a part. So too, many changes in consumer preferences arising from, for example, nutrition education. All these factors constantly inter-react.

Estimation of domestic industrial demand for raw materials of agricultural origin, if based on the estimated demand for finished industrial products, will serve to secure better co-ordination between agricultural and industrial development planning. The establishment of new industries is induced by the supply of raw materials, notably fibres, but in such cases there will of course be repercussions on the export of raw materials and on imports of the corresponding finished goods. The establishment of new industries also stimulate the introduction or expansion of certain agricultural raw materials, such as sugar.

In assessments of prospects for agricultural exports for planning purposes, both long-term trends and short-term fluctuations have to be taken into account. Long-term trends are particularly important for three crops and for other commodities for which the level and pattern of production cannot be quickly changed. Two important factors influencing the trade of the region have been the development of synthetic substitutes for certain raw materials, and the growing trend in many importing countries towards greater agricultural self-sufficiency. Further studies of long-term trends of demand for such commodities as rubber, taking into account the relative production cost etc. of natural and synthetic products, would be very useful.

In actual planning, short-term prospects and fluctuations are often more significant than long-term trends. Because world trade is now so highly geared that economic changes in one country often have important effects on the demand in others, any assessment of export prospect must cover a wide range of both importing and exporting countries.

The yields in agriculture are so low in the LDCs that it is not very difficult to increase production levels. As John P. Lewis points out: "Paradoxically, for the rate of growth, the very backwardness of agriculture is a favourable factor. There is so much scope for the wider application of known techniques, involving hardly any additional capital investment, that in the initial period, at any rate, progress can be very rapid".

Planning for the agricultural sector has been stressed in every plan in Pakistan ever since the inception of planning.

## FIRST PLAN

The First Five-Year Plan (1955—60) gave the highest priority to agricultural development

(particularly food production). Targets recommended in the Plan included a 9% increase in foodgrains, and large increases in cotton, oilseeds, sugar cane, fruits and vegetables. More than half the increase in production was to be brought about by increases in the yield per acre. The crop improvement programme included expansion and improvement in plant breeding, increases in the production and distribution of improved seeds, the distribution and use of larger quantities of fertilisers and manures, extension of plant protection measures, more efficient use of available water, and more extensive work and research in all phases of crop production.

The First Plan was a success. Production of food crops increased from 5,655 millions in 1954-55 to 6,592 million tons in 1959-60, thus registering an increase of 17%. In the case of cash crops, production increased from 9,275 million tons to 11,083 million tons in the same period, an increase of 19%. The index of agricultural production (with 1959-60 = 100) rose from 90 in 1954-55 to 100 in 1959-60. Agriculture in 1959-60 accounted for 48.2% of GNP as against 51.3% in 1954-55. In 1949-50 agriculture had accounted for 59.62% of GNP.

## SECOND PLAN

The Second Plan (1960—65) again stressed agricultural development on the grounds that it constituted the largest segment of Pakistan's economy with 85% of the population living in the rural areas, most of whom were directly or indirectly dependent on agriculture. The main objectives of the agricultural programme for the Second Five-Year Plan were as follows:—

- (i) Self-sufficiency in the basic food production, maintaining, as a minimum, the present levels of foodgrain consumption for the rapidly growing population;
- (ii) raising of the dietary standards through increased supplies of fish, fruits, vegetables, sugar and livestock products;
- (iii) expanding the output of jute, cotton, tea and forest products to the maximum possible extent;
- (iv) working towards an export position across the full production front, not excepting foodgrains; and
- (v) increasing employment opportunities and reducing under-employment in agriculture.

During this period (1960—65), the overall performance of the agriculture sector was quite heartening. The rate of growth in agriculture, which was shared about equally by both the Provinces, was over 3.4 per cent per annum against the annual rate of 1.3 per cent upto the middle of the 1950's. This rate of growth assumed great significance both because of the size of the agriculture sector in the economy and because of the dependence of crucial targets of exports, savings and prices on agricultural development. This rate of growth in agriculture was the result of institutional changes, increased use of inputs and favourable weather. An analysis of the agriculture sector indicated that on a trend basis the value of crop output in West Pakistan grew about 5 per cent per year or 26 per cent for five years. Of this increase, it was estimated that ground water development accounted for about 9 per cent, fertilizer 5 per cent, plant protection, surface water development 4 per cent, improved seeds 3 per cent and other factors about 1 per cent. The value of the crop output in the then East Pakistan grew by about 20 per cent during these five years. Of this increase, it was estimated that about five per cent came from extension of the area, about 5 per cent from the use of fertilizers, about 4 per cent from improved seeds and about 2 per cent from plant protection, while the remainder could be attributed to changed rice technology and increased labour inputs. However, a systematic study is now under way in the Planning Commission to determine the effect of various inputs on agricultural production during the Second Plan period, which may or may not confirm the above.

An encouraging upward trend was discernible in all the sub-sectors of the agricultural development programme. The output of foodgrains increased by 27 per cent against the Plan target of 21 per cent, indicating an average annual rate of growth of 4.9 per cent. Livestock and livestock products increased by about 2 per cent, forestry by 4.7 per cent, and fisheries by 3.1 per cent per annum. The use of fertilizers by the farmers, in terms of plant nutrients, more than quadrupled between 1959-60 and 1964-65. Curative and preventive plant protection measures were stepped up. The colonization programme was expanded and about 1.02 million acres were

brought under cultivation in the newly colonized areas. In the field of agricultural education, two agricultural universities were established, one in each of the then two provinces, of East and West Pakistan under the One Unit scheme.

The index of agricultural production increased from 100 in 1959-60 to 128 in 1964-65; during this period production of food crops increased by 19.4% from 6,592 million tons to 7,871 million tons and that of cash crops by 71.8% from 11,083 million tons to 19,046 tons. The "green revolution" had come and the country and the world hailed it. During this period fertiliser consumption increased by 332%; use of improved seed increased, plant protection measures were intensified (area covered by ground and aerial operations was 6,468 million acres or 281% as compared to 1959-60), the mechanisation programme consisting of land development by tractors progressed the area developed in 1964-65 was 71,000 acres as against 36,000 acres in 1959-60). Agriculture in 1964-65 accounted for 42.1% of the GNP as against 48.2% in 1959-60.

### THIRD PLAN

The main objectives and targets of the agricultural programme of the Third Five-Year Plan (1965—70) were as follows:—

- (i) achievement of an annual growth rate of 5 per cent with an expanded programme of improved agricultural inputs;
- (ii) increase in the real income of farmers at the same rate as the per capita increase in the non-agricultural sectors;
- (iii) movement towards self-sufficiency in food requirements to the extent compatible with other needs of the economy and the achievement of an improvement in nutritional standards, and
- (iv) promotion of agricultural development on a sound self-propelling basis and bringing about further improvements in marketing co-operatives, storage, credit, educational and other institutional and infrastructural facilities.

During the Third Plan period, the overall performance of the agriculture sector was quite heartening. Although the rate of growth in agriculture during the first two years of the plan was adversely affected by natural calamities as a result of which it actually declined to 1.4 per cent, yet the bumper harvest in 1967-68 pushed the growth rate to 10 per cent, thereby improving the average annual growth rate of this sector in the first three years to 3.2 per cent. The overall agricultural growth averaged around 4.5 per cent per annum as compared with the set target of 5 per cent.

The index of agricultural production rose in this five-year period from 128 to 186 (1959-60 = 100). Production of food crops increased from 7,871 million in 1964-65 to 11,368 tons in 1969-70, registering an increase of 44.4%. Production of cash crops increased from 19,046 million tons in 1964-65 to 26,853 tons, an increase of 41.1%. The "green revolution" had been sustained in the second half of the sixties despite the 1965 war with India and a reduction of 27% in foreign aid as compared to the original expectations. The share of agriculture in the GNP had decreased to 39% in 1969-70 as compared to 42.1% in 1964-65.

### FOURTH PLAN

The Fourth Plan (1970—75) objectives and targets of agricultural development were:—

- (a) to maintain and further accelerate the pace of agricultural development attained during the Third Plan through a further broadening of the use of advanced technology and an efficient utilization of land, labour and other resources;
- (b) to achieve and maintain foodgrain self-sufficiency and to use the increased productive capacity for the release of resources to expand production of protective and protein-rich foods in order to meet the consumer's nutritional needs more effectively;
- (c) to further increase production of the agricultural raw materials required by the domestic industries and for export, particularly of cotton;

- (d) to develop foodgrain exports, to the extent feasible, in the light of the international market situation and domestic needs and possibilities; and
- (e) to broaden the distribution of farm income and to provide the farmers with more amenities for better living.

The Fourth Plan envisaged physical targets of various major crops and allied sub-sectors of the agriculture sector in order to achieve an overall growth rate of 5.1 per cent. The major food crops, consisting of wheat, rice, maize and other crops, were projected to increase to 14.95 million tons in 1974-75 from a benchmark production of 10.83 million tons in 1969-70, showing an increase of 38 per cent. The output of wheat was projected to increase to 9.50 million tons, rice to 3.7 million tons, maize to 1.00 million tons and other crops to 0.75 million tons, showing an increase of 36 per cent, 61 per cent, 25 per cent and 3 per cent in 1974-75 over their respective benchmark production in 1969-70. As regards other crops, gram was expected to increase by 16 per cent, pulses by 25 per cent, sugarcane by 19 per cent, cotton and cotton seed by 43 per cent each, oilseeds (other than cotton seed) by about 100 per cent, tobacco by 33%, potatoes by 50 per cent and other vegetables by 30 per cent during 1974-75 compared to their respective benchmark production during 1969-70. In order to achieve these targets, the physical targets of key inputs like water, fertilizer, improved seeds, plant protection and improved farm practices were planned.

The physical performance in the agricultural sector during the first two years (1970-72) was most unsatisfactory. Even wheat production declined by 10% as compared to 1969-70. The index of agricultural production fell from 186 in 1969-70 to 174 in 1970-71 and to 183 in 1971-72. In 1972-73 it slightly improved to 188 and then to 196 in 1973-74. In 1974-75 it again fell to 186. Actually the Fourth Plan period witnessed unfortunate stagnation in the agricultural sector which has been attributed to insufficient rains, floods, shortage of canal water for irrigation, delay in the commissioning of the Tarbela Dam, and pest attacks on sugarcane and cotton.

Production of food crops in 1974-75 stood at about 11 million tons as against 11.368 million tons in 1969-70; the production figures for cash crops in these two years were 21.989 million and 26.853 million tons respectively. Production of food crops as a whole had actually declined and that of cash crops had decreased by the substantial figure of 18.1%. The "green revolution" had gone into the red. The share of agriculture in the GNP had come down to 34% in 1974-75 as against 39% in 1969-70.

According to a household income and expenditure survey conducted by the Statistics Division the disparity in per capita consumption of food and non-food items in urban and rural areas was significant in 1971-72.

TABLE 21.1

*Monthly Per Capita Consumption of Food Items in Rural and Urban Areas in 1971-72*

Food Items	Unit	Rural	Urban
1. Wheat and Wheat flour	Seer	12.45	10.70
2. Rice and Rice flour	Seer	1.44	1.20
3. Vegetable Oil	lbs	0.27	0.89
4. Mustard Oil	Seer	0.01	0.06
5. Mutton, Beef and Fish	"	0.39	0.69
6. Eggs	Nos.	0.94	3.44

Source: Statistics Division.

TABLE 21.2

*Monthly Per Capita Consumption of Non-Food Items in Rural and Urban Areas in 1971-72*

	Rural	Urban
	Rs.	Rs.
1. Apparel, footwear and personal effects	26.82	35.09
2. Fuel and lighting	12.80	18.32
3. House rent	13.45	41.87
4. Furniture and utensils	2.03	3.34
5. Medicines	4.88	6.35
6. Education	1.82	7.92

*Source:* Statistics Division, Household Income and Expenditure Survey, 1971-72.

The average monthly income of a household in rural areas was Rs. 234.43 as compared to Rs. 360.54 in urban areas in 1971-72. Statistics regarding income distribution further highlight the poverty in rural areas as would appear from Table 21.3.

TABLE 21.3

*Income Distribution in Rural and Urban Areas during 1971-72*

	Per cent of all Households	
Monthly Income per Household	Rural	Urban
Less than Rs. 200	52.4	28.4
Rs. 200 to Rs. 399	38.6	46.8
Rs. 400 to Rs. 499	4.3	8.9
Rs. 500 to Rs. 749	3.1	8.9
Over Rs. 750	1.6	7.0

*Source:* Statistics Division, Household Income and Expenditure Survey, 1971-72.

The position has since 1971-72 changed for the better, that is relatively, as between the rural and the urban population. There has been a massive redistribution of income from the urban to the rural sector through vastly improving the price relationship between agricultural produce and urban products, by mobilising and utilising rural resources through institutional changes, and by improving the rural infrastructure. In 1974-75 the lot of the farmer is much better as compared to 1969-70 although agricultural production has declined in physical terms. Urban labour and gentry have paid for this and, probably, rightly so.

### AGRICULTURAL ENQUIRY

In 1975 Prime Minister Bhutto appointed a high-powered Agriculture Enquiry Committee under the chairmanship of the Food and Agriculture Minister, Sheikh Rashid. In August 1975 the report was published after approval by the Prime Minister and the Council of Common Interest. It is a comprehensive and useful basis for agricultural development. The emphasis in the report is on better organization and a greater degree of forward-looking planning. The crux of the problem lies in clearing the physical and institutional barriers that impede agricultural production and in galvanising the farmer to undertake a concerted drive.

Here is a summary of the major recommendations of the Agriculture Enquiry Report.

(1) **Improved seeds:** Import of 17,000 tons of wheat seed from Mexico and maximum procurement of local seed for sowing during 1975-76 and for multiplication of the quality seed for covering the entire area in 1976-77.

(2) **Cotton:** Import of delta, pine and other high-yielding varieties of cotton seed for a pilot project in Sahiwal. Strict enforcement of the Cotton Control Act with special reference to varietal zoning. Vigilant supervision of ginning of cotton to prevent seeds admixtures. Prohibition of selling of cotton seed by unauthorised ginners and dealers.

(3) **Sugarcane:** Encouragement of frost tolerant L-116 variety of sugarcane for general cultivation and import of frost tolerant varieties from Mexico, Argentina, etc. Constitution of a Provincial Expert Committee for conducting comprehensive research on various aspects of sugarcane production. Expeditious establishment of a National Sugarcane Research Institute.

(4) **Maize:** Import of hybrid maize seed from Australia for the next crop. Establishment of a 600-acre oilseed farm in Kaghan.

(5) **Pulses:** Creation of distinct and separate units in the existing provincial research institutes of research on pulses.

(6) Launching of a co-ordinated programme for promoting **vegetable cultivation** to improve quality and yield for local varieties.

(7) **Spices:** To save valuable foreign exchange, local growing of spices should be encouraged.

(8) **Fruits:** Establishment of fruit nurseries for producing disease-free fruit plants and import of good quality fruit seedlings and cuttings, particularly for promoting the production of pistachio, apples, bananas and mangoes.

(9) **Fodder:** Promotion of such fodder crops as Napier grass hybrid, sadabahar, sorghum, Sudan grass hybrid etc. Reservation of 2,000 acres in Punjab and Sind for the production of fodder seeds.

(10) **Seed Industry:** Expeditious establishment of a seed industry in the public sector. Reservation of 68,000 acres quality land for production of improved seed (Punjab 41,480 acres; Sind 19,040 acres, NWFP 7,480 acres). Promulgation of seed laws to control the production, distribution and testing of seeds. Establishment of national and provincial seed councils. Separate and independent functioning of seed testing and seed procurement agencies. The plant density of cotton, rice and sugarcane to be increased to optimum.

(11) **Land and Water:** Vigorous pursuit of investigations on the establishment of new reservoirs and search for resources for their establishment. More vigorous exploitation of ground water resources.

Extension of electricity to rural areas to promote tube wells. Continuation of the subsidised programme for installation of diesel tube-wells, watch on the over-exploitation of ground water reservoir and the implementation of and accelerated programme for control of waterlogging and salinity.

Accord of high priority to the more economical use of water by land levelling and scientific water management.

To evolve improved technology for the utilisation of saline water for irrigation purposes.

(12) **Fertiliser:** Launching of a vigorous, nation-wide campaign to promote the correct use of fertilisers.

An in-depth study of various fertiliser distribution systems for better and extensive distribution. Larger supply of easy, institutional credit to enable farmers to use more fertilisers.

Adjustment in fertiliser prices in relation to output to promote its larger use and also in the relative prices of nitrogenous and phosphatic fertilisers for moving toward their use in desirable ratios.

(13) **Plant protection:** Provision of 100 per cent coverage—from aerial and ground operations—to cotton, rice and sugarcane crops. Improvement in quality, effectiveness and coverage of plant protection operations and inclusion of non-chemical controls.

Expansion in the pilot training programme and increase in pilots' emoluments. Concession in the import of plant protection equipment and material for its manufacture. Greater attention to integrated pest control management and better coordination between Federal and provincial plant

protection departments. Setting up of joint committees of officials and farmers for advice on plant protection programmes and for checking on performance.

Encouragement of the private sector for offering a full package of services including technical advice and spraying operations on hire. Expansion of the pest identification and warning system. Imports of pesticide in active form. Local manufacture of pesticides. Provision of adequate foreign exchange for the import of active ingredients and intermediate products.

**(14) Farm mechanisation:** Meeting the unmet demand for suitable agricultural machinery expeditiously. Liberal import of power tillers through the public sector. High priority to manufacture of suitable agricultural machinery, particularly tractors. Vigorous efforts to make mechanisation acceptable to small farmers.

Improvement in quality, efficiency, and output of animal-drawn implements and hand tools.

Training of a larger number of operators of agricultural machinery through state-run centres at divisional level. Improvement in facilities for repairs and easier availability of spare parts

Better quality control and inspection of local and imported machinery.

Extensive research on improved design of machinery and economic impact of its use.

**(15) Agricultural credit and marketing:** Strengthening of cooperative banking network and elimination of middle tier of the central banks. Fund raising by the ADBP through debentures etc., extension of pass book system and banking network in rural areas. Extension of input credit in kind linked with marketing of agricultural produce.

Implementation of price stabilization policies for all agricultural produce and expansion of role of organization like PASSCO.

Introduction of regulated markets in NWFP and Baluchistan. Expansion of farm to markets roads. Provision of facilities, incentives and regulation to improve grading of exports items.

**(16) Agricultural Research:** Coordination between research institutions should be improved through the Agricultural Research Council.

Financial support for agricultural research must be stepped up.

Research priorities need to be reviewed from time to time to ensure attention to all important problems.

—Crop research institutes should be given responsibility for maximisation of crop output in their adjacent or specified areas.

**(17) Agricultural extension :** Rather than increasing the staff in the immediate future, the priority should go to improvement in level of expertise through adequate pre-service and in-service training.

Training for farmers should be given higher priority. Demonstration blocks should gradually replace the demonstration plots.

**(17) Agricultural education:** Government should plan for an increase in output of graduates from 1,030 in 1975 to 3,500 by 1980.

**(18) Agricultural statistics:** Prompt compilation of data and release of results of periodic censuses and surveys. Improvement in crop statistics through better supervision of revenue. Extension of use of sample surveys to more crops for improving area and production statistics.

Intensification of research on in put-out put coefficients of crops and crop forecasting models.

Establishment of Federal and provincial agricultural Statistical Coordination Boards.

Extension of statistical coverage system to the non-reporting areas.

Feasibility of use of advanced technology (e.g. use of satellites), for gathering of agriculture data.

**(19) Cooperatives and Integrated Rural Development Programme:** Immediate commencement of the scheme for cooperative farming. Wider role of cooperatives in rural developments rather than restricting them to credit operations. Utilization of cooperative structure for livestock projects, rural electrification and small agro-industries. More precise definition of role of different departments involved in the Integrated Rural Development Programme (IRDP).

Markaz (centre) officials to coordinate work of other departments without any authority over them.

The Markaz should be located according to the objective conditions in each province. (The Markaz—under the IRDP—is the point of integration of all activities, services and supplies relating to the fulfilment of the needs of the farming communities.)

Early posting of departmental staff at markazes and training arrangements to coincide with markaz opening.

**(20) Farm incomes and incentives:** The minimum prices of agricultural produce to be assured so that the growers get a fair and equitable return. Consideration of package of input and output prices keeping in view growers' and consumers' interests. Adjustment of profitability of a certain crop vis-a-vis other crops to expand its production. For longer production, price incentives to be matched also by physical and development efforts. Keeping of input prices to the minimum suspendable level. Provision of subsidies for input whose adoption needs to be encouraged.

**(21) Landlord-tenant relationship:** Encouragement of shift from batai to cash rent wherever objective conditions permit. Rights and obligations of tenants and landlords as determined by law should be strictly enforced.

**(22) Food procurement, distribution and storage:**

**Wheat:** Finalisation of wheat operation plan at least three months before the commencement of wheat year. Maintenance of a minimum reserve of about 5,00,000 tons to stabilize prices and facilitate operation from one year to another.

Continuation of the present arrangements for voluntary procurement of local wheat. Announcement of procurement price before sowing time. Continuation of partial provisioning, bringing the issue price at par with the procurement price in due course. Elimination of bogus ration cards and checking of the quality of atta in flour mills and ultimate replacement of the present depot system by a more efficient mode of distribution.

**Rice:** Fixation of paddy price by Deputy Commissioners in consultation with growers and millers and paddy purchase by public sector by mills and agencies to ensure better return to growers. Modernisation and expansion of rice milling facilities.

**Sugarcane:** Continuation of existing arrangements for regulation and distribution of sugar. No restriction on movement of gur and khandsari between various provinces.

**Foodgrains Storage:** Construction of an additional storage capacity of 10,00,000 tons by 1979-80. Construction of house-type godowns as they are most appropriate under our conditions. Systematic assessment of foodgrain storage requirements.

**Forestry and range management:** Expeditious implementation of the Government decision regarding raising timber extraction through the public sector. Greater use of improved logging techniques. More extensive use of fast-growing species and quality nursery stock. Phased extinguishing of private rights in forests. Encouragement of sericulture. Popularising fruit tree planting in suitable areas in hills. Management of private forests through cooperative societies with technical guidance by forests departments.

Tree planting in form with lots, around village abadis and near tube-wells. Planting of stray trees should be avoided so as to facilitate aerial spray. Greater emphasis on watershed management and afforestation in hill areas through education of farmers in preference to lay means.

Transfer of inland fisheries to animal husbandry departments and linear plantation to forest departments. More strict enforcement of forest laws. Re-transfer of Pakistan Forest Institute to the Ministry of Agriculture (NWFP Government does not agree with this recommendation).

More specialized training of forests staff and extension of forest research.

**Livestock:** Introduction of modern methods of beef production in cooperation with friendly countries with permission for export of incremental production of beef under joint venture projects. Increase in livestock productivity without increasing its population.

Treatment of animal husbandry veterinary science graduates at par with doctors and engineers. Increase in the output of animal husbandry experts by 100 per cent in the next few years. Transfer of Federal Poultry Board from Industries Division to Livestock Division. More intensive training to stock assistants and their upgrading to veterinary assistants.

Expansion of the artificial insemination programme with provision for mobile insemination units at each tehsil veterinary hospital and import in restricted numbers of exotic dairy cattle so as to produce semen in the country in addition to importing frozen semen from outside.

Increase in the output of rural poultry through steady replacement by cross-bred chicken like the Lyallpur silver black and proper arrangements for the supply of high potency feed.



Production of grandparents and great grandparents of stock for layers and broilers should be introduced in the country.

Adequate supply of veterinary drugs and medicines and increase in the production of serum and vaccines as well as expansion of disease preventive measures in the field. Training of farmers in the simple operations like dosing, vaccination, etc., in the four provinces as in operation in northern areas. Setting up of more milk chilling centres with provision of transport facilities in rural milk pockets.

#### **(24) Establishment of Livestock Research Council.**

**Fisheries:** Acceleration of construction work of fish harbour Gwadar and the provision of fish jetties in suitable centres like Sonmiani and Ormara. Improvement in handling and distribution of fish. Coaster services for linking fish centres in Baluchistan and Karachi.

Establishment of a Fish Development Corporation and measures to protect our coastal rights. Strengthening of the organisational set-up of Federal and Provincial fisheries departments and expansion of educational and research facilities. Conservation of the fish wealth and location of new fishing grounds. Establishment of large hatcheries on modern lines. Encouragement of commercial fish farming. Transfer of the Fisheries Board from the Ministry of Commerce to the Ministry of Food and Agriculture.

There have been many good reports in the past 28 years on agricultural development; some ideas have been utilised but quite a few have been confined within the archives of government offices. It is to be hoped that the report of the Agriculture Enquiry Committee of 1975 will not meet this fate.

During the Fifth Plan period (1975—80 or more likely 1976—81) emphasis will continue to be laid on accelerating production of foodgrains (especially wheat) with a view to obtaining self-sufficiency in food as early as possible, and encouraging larger production of oilseeds, beef and poultry to improve nutritional levels. Emphasis has also been laid on increasing the production of cotton, Basmati and Irri rice, etc., for meeting domestic requirements and increasing export earning. Key agricultural inputs such as fertilizers, seed and pesticides, are to be made available on an unprecedented scale. Appropriate price support programmes for agricultural produce are to be continued. Large funds have been allocated for control of salinity and water-logging, completion of the Tarbela Dam, development of underground water resources, power and transport, and these will directly affect the agricultural sector.

The programme for evolving a technology suited to the Barani areas (areas wholly dependent on rainfall for their water supply) is under implementation and has indicated a great potential for increasing agricultural production in these areas. The seed-based technology in these areas will be popularised among Barani farmers by setting up demonstration projects on an expanded scale. A programme of cooperative farming is proposed to be implemented with the intention of increasing agricultural output per unit and improving the socio-economic status of the rural sector and of the small land-holders. The farmer and the country will look forward to the success of these efforts in the form of another sustained "green revolution" as was witnessed in the sixties.

## **Land Reforms**

Land tenure is the body of laws and customs that determine and adjust the respective rights of the people and the State in the ownership, control, and use of land. The expression "Land Reforms" applies to all measures aimed at eliminating the undesirable features of a land tenure system and making land a more efficient instrument of economic development.

Land reforms include laws, regulations or other arrangements designed to eliminate large concentrations of land ownership, consolidate uneconomically fragmented holdings, adjust landlord-tenant relations, and provide various supplementary services required to strengthen the institutional structure agriculture. Land held in very large units by absentee owners is rarely operated efficiently. It is usually characterised by indifferent management, lack of economic incentives to the tenant-cultivator and general resistance to productive technology. Intelligent subdivision and redistribution of large holdings among actual cultivators can provide the income opportunities necessary to stimulate production.

On the other hand, excessive fragmentation of landholdings is fatal to operating efficiency. Similarly, the various laws and customs governing the sharing of cost and returns by landlords and tenants can promote or retard production, depending upon whether labour, management, and capital receive shares proportionate to their respective contributions to the enterprise. A system that tends to hold the cultivator down to the level of bare subsistence, more or less regardless of the effort and skill exerted by him, has been rightly called "the dead hand of feudalism." It is, by its very nature, inefficient as well as iniquitous.

Good husbandry and wise capital investment can be achieved only when the tenant enjoys reasonable security either through a permanent tenure of ownership or through safeguards against arbitrary eviction. The tenant should also be offered an effective incentive by way of a fair share of the benefits of increased production.

The indirect economic benefits of land reforms are equally important. To the extent that a broader distribution of land resources in units of optimum size is accomplished, a vigorous middle income class is created. The existence of substantial number of families in the middle income category is, in turn, at once a stimulus and a stabilizing force for the market for goods and services provided by other sectors of the economy. In more than one country, far-reaching land reforms have set the stage for rapid industrial development. A natural consequence of the economic improvement that accompanies effective land reforms is healthier social and political conditions. Higher and more widely distributed incomes furnish the means and encourage the desire for better educational, health and welfare standards. Equality of opportunity promotes confidence in the government that provides it, and is conducive to vigilant and enlightened citizenship.

### AGRARIAN REFORMS COMMITTEE

In 1949, an Agrarian Reforms Committee appointed by the All-Pakistan Muslim League recommended the following action:

- a) immediate abolition of jagirs and inams without compensation;
- b) extinction of occupancy rights in land and conferment of proprietary rights on occupancy tenants;
- c) prohibition and abolition of feudal servitudes and illegal dues and exactions from the tenants;
- d) grant of adequate security of tenure to the tenants at will; and
- e) provision for the grant of a substantial and adequate share in produce to the tillers of the soil.

Earlier, in the year 1945, a limited but unsuccessful move towards land reforms was attempted in Sind. A Tenancy Law Committee, set up that year, had recommended the granting of specific rights to Haris (tenants-at-will). Its report was examined but no action was taken on its recommendations. After independence, another Committee known as the 'Hari Committee, under Sir Roger Thomas, himself a landowner, was appointed in 1947 and it submitted its report in 1948. The Committee raised serious objections to the granting of permanent land rights in holdings and were of the opinion that the Government should regulate the practices governing the sharing of produce (batai). From these recommendations emerged the Sind Tenancy Act (No. XX of 1950), which was later amended from time to time. It afforded security of tenancy to permanent tenants, limited produce rents between one-third and half of the produce and abolished free service and unauthorised cesses.

In the Punjab, a Tenancy Laws Enquiry Committee was appointed in 1949. It recommended, *inter alia*, the minimum area to be left with landlords, extinction of occupancy rights and abolition of cesses. Later, on the recommendations of the committee, two new laws were enacted, namely, the Protection and Restoration of Tenancy Rights Act, 1950, and the Punjab Tenancy (Amendment) Act of 1952. The main provisions of the latter were:

- (1) Landlords owning 100 acres or more could reserve only 50 acres (excluding area under garden) for personal cultivation.
- (2) The land produce and the Government dues were to be shared by the tenant and the

landlord in the ratio of 60 and 40 per cent respectively.

- (3) The Act provided security to the tenants by conferring proprietary rights on occupancy tenants.
- (4) The Act abolished cesses and forced labour.

In the North-West Frontier Province, a Tenancy Act was put on the Statute Book in 1950. It was amended in 1952, and in the same year the Protection and Restoration of Tenancy Rights Act was passed. These Acts conferred proprietary rights on all occupancy tenants and granted security of tenure for a limited period of three years. They also required that in the case of eviction, a tenant should be duly compensated for the improvement of land effected by him. The Provincial Governments did not try to give too many rights to the tenants, but reduced the substance of ownership by the landlords.

No action was taken to reform or improve the agrarian structure in Baluchistan and the former Princely State of Bahawalpur, now absorbed in the Punjab Province.

All the measures outlined above were undertaken before the integration of West Pakistan into One Unit in 1955. But the economic impact of the post-Independence reforms was negligible. Although the provision of the new laws enacted by the integrating units of West Pakistan were of considerable importance, they failed to achieve their purpose. Most of the provisions proved unworkable on account of inherent defects. The pace of implementation of the tenancy laws was rather slow, partly on account of the insufficient administrative arrangements and partly because the tenants were too weak to assert and realize the rights and benefits conferred upon them by the new laws. As the earlier Governments were dominated by landlords, they failed to take positive steps in the interest of the peasantry; rather their half-hearted measures generated new frictions and bitterness between the landowners and the tillers of the soil, which adversely affected agricultural production.

### AYUB LAND REFORMS

A Land Reforms Commission was appointed by the late President Ayub in 1958 and the Land Reforms came into effect on the 7th February 1959. According to the then President, these reforms were "an absolute necessity for the survival of the system and the values which we cherish and which brought Pakistan into existence as a free State."

The most important measure under the new law was the limitation of individual ownership to an area of 500 acres of irrigated or 1,000 acres of unirrigated land. one acre of irrigated land being reckoned as equivalent to two acres of unirrigated land. The new restrictions were, however, subject to the following exemptions.

- (a) An existing owner was allowed to retain out of his present holding such additional area, if any, as would bring the total area retained by him to the equivalent of 36,000 produce index units.\*
- (b) An existing owner was allowed to retain an orchard not exceeding 150 acres, provided it was in blocks of not less than 10 acres each and had been entered in the records since the Rabi season of 1956-57.
- (c) An existing owner was allowed to transfer to any or all of his heirs such additional area of 18,000 produce index units, taken together with any area gifted already by him to all or any of his heirs on or after the 14th August, 1947.

---

\*Produce Index Units were measured in terms of the comparative productivity of an area and expressed for the purpose of schemes relating to the resettlement of displaced persons.

- (d) An existing owner was allowed to transfer by way of gift, subject to a maximum area equivalent to 6,000 P.I. Units. to each of his female dependants.
- (e) Owners of existing homestead and farms were allowed to retain such additional area as it was considered necessary for the purpose.

As a result of the Land Reforms Commission all jagirs in Pakistan, of whatever kind and by whatever name described, were abolished. The total number of jagirs in the former province

of Sind amounted to 400, involving an area of over 11,00,000 acres. These jagirs did not pay any land revenue except charges for the use of canal water to the Government. The abolition of this institution brought an additional revenue to the Government besides the land that became available for redistribution to deserving cultivators: its sale will bring considerable funds to the provincial treasury. The Government gets annually about Rs. 3.1 million in the form of land revenue assignment.

The West Pakistan Land Commission notified different schemes for the permanent disposal of resumed lands. In the first instance, lands were offered to the sitting tenants. Normally, an area equal to a subsistence holding (12½ acres in Punjab, N.W.F.P. and Baluchistan and 16 acres of irrigated land in the Sind area and twice as much in case of the land being unirrigated) was sold to a tenant. Then land was offered to the small landowners for the upgrading of their holdings to the subsistence level, or even higher, but not exceeding the size of an economic holding. Land was also offered to landless labourers. The price to be charged from the tenant was fixed at Rs. 8 per produce index unit.

An acreage of 23,52,716 was resumed under the land reforms. Of this, land measuring about 16,00,000 acres has already been disposed of under the sales, upgrading and auction schemes, and the balance of about 7,50,000 acres is still available for disposal. Most of the area is of inferior quality, under river beds, mountainous terrain, etc., and, therefore, does not attract buyers. The total number of persons who benefited by these reforms is about 2,00,000 of whom 1,50,000 were tenants in cultivating possession of the resumed area which was sold to them under the sale scheme, about 46,000 were other tenants who got land under the upgrading scheme envisaging upgrading of holdings to certain lands and about 4,000 were small landowners, to whom resumed land was sold under the upgrading scheme. The figure of 16,00,000 acres relating to disposal of resumed land also includes the area given for maintenance of existing Shikargahs (hunting grounds) in the interest of preservation of game and an area of about 2,00,000 acres was sold to Government departments.

Compensation to the old owners was provided at a progressively diminishing rate, with a view to ensuring smooth and orderly implementation of the reforms. All payments on account of compensation and interest were made from a social fund created by depositing the sale proceeds of the resumed areas sold to the tenants. The Government exchequer was thus not to be burdened because the compensation payable was less (varying from Re. 1 to Rs. 5 per produce index unit) than the sale price recovered from the new owners (Rs. 8 per produce index unit). The difference was meant to meet the administrative costs of the programme and other such liabilities. The total amount payable to expropriated owners by way of compensation for resumption of land was Rs. 92.6 million, which was much less than the prevailing market value.

## CONSOLIDATION OF HOLDINGS

The land reforms law placed restrictions on the partition of certain joint holdings and alienation of holdings below a certain level with a view to preventing the size of the holdings from falling below the subsistence and economic level. To supplement these measures, an ambitious programme of consolidation of scattered and fragmented land holdings was introduced and implemented.

Fragmentation of holdings had undermined the foundations of the agricultural economy, as it involved waste of time, money and effort and brought only poor returns for the capital and labour of the cultivator. It also caused waste of water, and even waterlogging, for it involved the use of unnecessarily long, tortuous and badly-aligned water courses from wells and canals. It also made the sinking of wells, drainage and levelling very difficult and such small fragmented plots were an obstacle to the employment of scientific methods of cultivation.

The West Pakistan Consolidation of Holdings Ordinance, was promulgated in 1960 as a supporting and complementary measure to the general land reforms programme, with the two-fold objective of acceleration of the pace of consolidation and compulsory consolidation of holdings. Upto 1969 about 12 million acres of land had been consolidated; there were some 1.5 million units at that time instead of some 3.5 million units before consolidation.

## BHUTTO LAND REFORMS

Within three months of assuming power Prime Minister (then President) Bhutto, who himself comes from an illustrious feudal family, introduced far-reaching Land Reforms in March 1971 under two Martial Law Regulations in the absence of a written constitution. The all-round purpose of the 1971 Land Reforms was to break the political and social hold of the feudal class over the rural masses. This was done by slashing down the ceiling on individual holdings drastically by two-thirds from 36,000 to 12,000 produce index units (P.I.Us). All lavish concessions previously allowed, such as additional retention of 150 acres as orchards, gift of land upto 18,000 P.I.Us to family dependents, exemptions allowed in the case of Shikargahs, Waqfs, stud farms etc. were done away with. All land in excess of the ceiling was resumed by the State without compensation for free redistribution among the landless or small tenants. The only concession allowed was for the retention of an area upto 2,000 P.I.Us. if the owner had adopted modern techniques of agricultural production by purchasing tractors and installing tube-wells on his land on or before December 20, 1971. Further, to facilitate consolidation of land, persons affected were permitted to interchange land with their family members.

As regards landlord-tenant relationship, the responsibility of seed provision entirely rests with the landlord. The payment of taxes is also the responsibility of the landlord but in most of the irrigated areas, water charges are to be shared by the landlord and the tenant. The right of pre-emption has been guaranteed to the tenant in the event of sale of land. The re-established landlord-tenant relations was intended to serve as an incentive for more production. But it has had rather the opposite effect in many cases.

The resumed land was distributed amongst landless peasants or those who own land below subsistence level. The State land will not be sold by auction. It will be distributed among peasants with the price to be realised in easy instalments. According to the Government decisions, the ceiling on allotment would be 12.5 acres in the N.W.F.P., 12.5 acres in the Punjab, 16 acres in Sind and 32 acres in Baluchistan.

Upto March 31, 1975 the number of owners who filed declarations of land holdings was 10,265 for a total area of 1,957 million acres. The area allowed to be retained with the owners was 1,074 million acres, and 0.802 million acres were resumed by the Government. Out of the total resumed land, 0.932 million acre were distributed among 53,458 small farmers/tenants, each getting an area equal to a subsistence holding. The table below shows the province-wise progress of the resumption of land and its redistribution among small farmers/tenants.

TABLE 21.4

*Progress of Land Reforms under Martial Law Regulations upto March 31, 1975*

(Area in 100,000 acres)

Particulars	Punjab	Sind	NWFP	Baluchistan	Total
<b>MLR 115 of 1972</b>					
No. of owners who filed declarations	6,143	2,981	570	471	10,265
No. of owners whose area was resumed	1,013	751	229	238	2,231
Total area owned by affected declarants	6.53	5.36	2.82	4.96	19.67
Total area retained by declarants	3.95	2.81	1.47	2.51	10.74
Total area resumed from declarants	2.58	2.55	1.34	2.45	8.92
Total area disposed of	1.64	1.16	1.25	0.27	4.32
No. of small farmers/tenants allotted land	31,545	10,388	9,429	2,096	53,458
<b>MLR 117 of 1972</b>					
Pat Feeder Land Areas resumed	—	—	—	6.05	6.05

The 1972 Land Reforms discriminated against civilian government employees, serving or retired. In their case the ceiling for land holdings was fixed at 100 acres if the land was acquired by them through any means other than inheritance. There was no comparable restriction on defence personnel, serving or retired. This discrimination would have been illegal under the 1973 Constitution on the ground of being discriminatory, but the Constitution specifically protects the 1972 Land Reforms (as also other Economic Reforms), and they cannot be challenged in a Court of Law on any ground whatsoever, including the infringement of Fundamental Rights guaranteed in the Constitution.

## LAND REVENUE CONCESSIONS

On November 10, 1975, Prime Minister Bhutto announced land revenue concessions for the small farmers. In order to compensate for the lost revenue, the rates on the larger holdings were increased. According to the Prime Minister's announcement:

- i) Small landowners owning up to 12 acres of irrigated or 25 acres of unirrigated land shall be exempted from the payment of land revenue, local rates, development cess and all cesses related to land revenue from Rabi 1975-76.
- ii) The relief would benefit more than 85 per cent of the country's farmers. More than 4 million landowners throughout Pakistan will benefit by this decision. The total number of landowners in the country is about 5 million. The maximum benefit will go to the Punjab where no less than 3 million landowners possessing up to 12 acres of irrigated or 25 acres of unirrigated land, will be exempted from payment of land revenue and related rates and cesses. About 8.5 million acres of land are likely to be covered by the exemption of land revenue. The total area in the possession of landowners is about 48 million acres.
- iii) For persons owning more than 25 and up to 50 acres of irrigated or more than 50 and up to 100 acres of unirrigated land, the existing rate of land revenue, local rates and cesses will be increased by 50 per cent.
- iv) These rates will be increased by 100 per cent in case of persons owning more than 50 acres of irrigated land or 100 acres of unirrigated land.
- v) Income-tax on landowners who are liable to it will now be fixed on the basis of the enhanced land revenue. The provinces impose an agricultural income-tax on a sliding scale which can be up to 5 times the land revenue.
- vi) The date of determination of the area of land held by a person for obtaining or for being liable to additional rates will be November 10, 1975.

It is only three years since Pakistan agriculture witnessed a complete restructuring of the landowner-farmer relationship, with a drastic reduction in the ceilings of ownership of land with the surplus being taken away without any compensation and transferred to a peasant proprietorship free of cost, and yet there are demands for even more far-reaching land reforms, despite the added concessions given to small farmers in November, 1975. Some suggest a ceiling of 25 acres and the more "generous" would go up to 100 acres. One could write a book on the socio-economic and socio-political implications of extended land reforms and the tenor of the logic advanced would, at least to a certain extent, reflect personal prejudices. On purely economic considerations and for securing the important objective of stability it is highly undesirable to have reforms with such far-reaching implications more than once in a decade or two.

# Review of Agricultural Production

TABLE 21.5

*Index of Agricultural Production (Major Crops) (1959-60=100)*

Year (July-June)	All crops	Food crops	Non-food crops	Fibres
1949-50	86	—	—	—
1954-55	90	N.A.	N.A.	N.A.
1959-60	100	100	100	100
1964-65	128	120	162	130
1969-70	186	177	214	185
1970-71	174	164	195	188
1971-72	183	170	169	245
1972-73	188	181	163	243
1973-74	196	190	188	228
1974-75	186	180	178	218

Source: Statistics Division.

TABLE 21.6

*Acreege, Production and Yield of Principal Crops*

Crop	1949-50			1954-55			1959-60			1964-65			1969-70	
	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P
Wheat	10,337	3,862	836.4	10,530	3,136	664.2	12,055	3,847	713.4	13,140	1,518	770.8	15,393	7,179
Rice	2,305	792	770.8	2,369	825	770.8	2,974	979	877.4	3,350	1,329	885.6	4,008	2,346
Bajra	2,368	370	352.6	2,191	349	352.6	1,990	324	360.8	2,250	439	434.6	1,560	297
Jowar	1,360	267	434.6	1,125	221	434.6	1,127	229	451.0	1,446	288	442.8	2,212	279
Maize	990	401	902.0	1,062	426	893.8	1,192	478	893.8	1,202	520	967.6	1,600	657
Barley	497	146	656.0	450	104	524.8	566	137	524.8	458	116	565.8	399	107
Total Food-grains	17,858	5,838	—	17,727	5,061	—	19,904	5,994	—	21,846	7,210	—	24,172	10,865
Gram	2,398	599	533.0	3,046	594	434.6	2,821	598	475.6	2,991	661	492.0	2,293	503
Total Food Crops	20,256	6,437	—	20,773	5,655	—	22,725	6,592	—	24,837	7,871	—	26,465	11,368
Sugarcane	542	7,725	31,660.2	752	8,696	25,953	980	10,494	2,390.3	1,243	18,373	32,988.6	1,532	25,952
Rape and Mustard Seed	907	142	352.6	1,275	216	377.2	1,387	235	770.8	1,207	212	393.6	1,184	246
Sesamum	49	6	270.6	60	6	229.6	76	6	237.8	83	9	247.0	56	6
Cotton	2,744	216	98.4	3,136	285	205	2,318	287	188.6	3,624	321	229.6	4,338	529
		(1,239)			(1,583)			(1,639)		(2,124)			(3,015)	
Tobacco	41	25	1,353.0	107	72	1,508.8	95	61	959.4	121	81	1,500.6	149	210
Total Cash Crop:	4,283	8,114	—	5,330	9,275	—	5,856	11,083	—	6,278	19,046	—	7,259	26,853
Total Principal Crops:	24,539	14,551	—	26,103	14,930	—	28,581	17,675	—	31,115	26,917	—	33,724	38,221

Y	1970-71			1971-72			1972-73			1973-74			1974-75		
	A	P	Y	A	P	Y	A	P	Y	A	P	Y	A	P	Y
1,033.2	14,771	6,374	959.4	14,325	6,781	1,057.8	14,754	7,325	1,107.0	15,105	7,508	1,107.0	14,397	7,000	1,082.4
1,353.0	3,715	2,165	1,303.8	3,599	2,226	1,377.6	3,656	2,293	1,402.2	3,736	2,416	1,443.2	3,866	2,150	1,238.2
426.4	1,853	355	418.2	1,876	354	385.4	1,512	299	442.8	1,812	346	426.4	1,511	287	475.6
516.3	1,378	324	524.8	1,253	307	549.4	1,236	297	533.0	1,456	372	574.0	1,145	295	533.0
910.2	1,581	706	1,000.4	1,563	694	984.0	1,594	695	975.8	1,563	755	1,074.2	1,515	735	1,057.8
598.3	347	90	606.8	388	101	582.2	406	107	590.4	506	137	606.8	459	137	608

—	23,645	10,014	—	23,004	10,463	—	23,158	11,016	—	24,178	11,534	—	22,893	10,604	—
483.8	2,559	481	483.8	2,383	502	467.4	2,514	544	483.8	2,738	601	492	2,659	600	491
—	26,204	10,495	—	25,387	10,965	—	25,672	11,560	—	26,916	12,065	—	25,552	21,808	—
37,810.2	1,572	22,801	32,381.8	1,365	19,648	32,135.8	1,318	19,632	33,234.6	1,564	23,533	33,579.0	1,655	21,000	28,290.0
475.6	1,260	265	467.4	1,389	296	475.6	1,319	292	475.6	1,331	288	483.8	1,233	288	459.3
303.4	76	10	303.4	103	13	287.0	73	10	311.6	82	12	336.2	51	8	318.8
270.6	4,284	534	278.8	4,837	696	319.8	4,967	691	311.6	4,559	648	319.2	5,019	624	278.8
		(3,050)			(3,979)			(3,947)			(3,704)			(3,567)	
1,713.8	150	111	1,656.4	125	86	1,525.2	108	62	1,271.0	115	65	1,254.6			
—	7,342	23,721	—	7,819	20,739	—	7,786	20,677	—	7,650	24,545	—			—
—	33,546	34,216	—	33,206	21,604	—	33,458	32,237	—	34,566	36,610	—			—

Tables 21.5 and 21.6 give an overall view of acreage, production, yields and trend of agricultural production over the past 25 years. The acreage under cultivation and the yield per acre determine the quantum of agricultural production. Extension of acreage depends on the availability of cultivable land (that is land which can be developed for agriculture at a reasonable cost) and the availability of water in reasonably sufficient quantity. Yields per acre depend on the productivity of the farmer.

The concept of productivity (discussed in some detail in the chapter on Industry and Power) is just as applicable to agriculture as to any other sector. Agricultural productivity depends on the social and work ethic of the farmer, availability of inputs (land, water, seed, fertilisers, plant protection, agricultural tools and implements, and credit), and the availability of other facilities, such as marketing, storage, and education, extension and research. Besides agricultural production is greatly affected by the vicissitudes of weather conditions.

Table 21.5 indicates that, with the year 1959-60 as the base, the index of production of major crops rose from 86 in 1949-50 to 186 in 1974-75. The increase from 1949-50 upto 1959-60 was 16.3% and from 1959-60 to 1969-70 86%; during the next five years agricultural production stagnated at the 1969-70 level. The production of food crops increased by 77% from 1959-60 to 1969-70 and has been barely maintained at that level in the next 5 years. Production of fibres increased by 85% in the sixties and by 17.8% in the first half of the seventies. Production of non-food crops increased by 114% in the sixties and fell by 16.8% during the next 6 years.

The trend in the development and allocation of acreage would be clear from Table 21.7.

**TABLE 21.7**  
*Acreage of Principal Food Crops and Cash Crops*  
(thousand acres)

CROP	1949-50	1954-55	1959-60	1964-65	1969-70	1974-75
Food Crops	20,256	20,773	22,725	24,837	26,465	25,552
Cash Crops		4,283	5,330	6,278	7,259	
Total :		25,066	28,055	31,115	33,724	

*Source:* Ministry of Food & Agriculture.

The area under food crops is about 75% of the total acreage under principal crops. The acreage under cultivation has been consistently increasing for the past 25 years although the increase between 1969-70 and 1974-75 was just marginal. The rate of increase in acreage was the highest in the decade 1959-60 to 1969-70; and increase of 19.2% in acreage under principal crops in 10 years was an achievement.

In a poor country like Pakistan increase in agricultural productivity should be the primary aim of an agricultural development programme based on sound planning. In the 20 years from 1949-50 to 1969-70 an increase in yields was registered and more so in the sixties. Between



1969-70 and 1974-75 the position has been stagnant so far as wheat and cotton are concerned, and it has actually deteriorated somewhat for rice and sugar-cane.

**Wheat:** Wheat has the largest area and yields the biggest tonnage among all food crops of the world. It is a hardy plant that can be grown in practically every country. Its planting and harvesting months vary and for this reason it is planted and harvested in every month of the year in some countries. The following wheat calendar gives an idea of sowing and harvesting times in different countries.

TABLE 21.8

*Time of Sowing and Harvesting Wheat*

Months	Sowing	Harvesting
January	Extreme late sowing in Pakistan and Punjab (India).	Chile, New Zealand, Australia, Argentina, Uruguay.
February	...	India, North Egypt.
March	Spring wheat in parts of Europe.	South Egypt, Tripoli.
April	Spring wheat in Northern Europe, U.S.A., Canada, Manchuria.	Asia Minor, Cuba, Cyprus, North India, Pakistan, Persia, Syria.
May	Spring wheat in extreme North of Europe, Siberia, U.S.A., Canada.	Japan, China, Central Asia, Morocco, Algeria, Tunisia, Florida and Texas of U.S.A., Pakistan.
June	Spring wheat in Europe, U.S.S.R., Australia, Argentina, Chile and Uruguay.	South France, Spain, Italy, Turkey, Greece, Southern States of U.S.A.
July	Argentina, Chile and Uruguay	Austria, Bulgaria, South New Zealand, France, Germany, Hungary, Italy, Rumania, Southern Russia, Upper Canada.
August	Argentina, Chile, Uruguay, Winter crop in Europe, spring wheat in New Zealand.	Belgium, Columbia, Denmark, Britain, Ireland, Holland, Poland, Central Russia, Canada, Northern States of U.S.A.
September	Winter crop in Europe, U.S.S.R., U.S.A., Canada, India, North Africa.	Scotland, Sweden, Norway, Canada, Southern Russia, Siberia.
October	—do—	Alaska, Finland, Scotland and Northern Russia.
November	India, Pakistan, U.S.S.R.	South Africa, North Argentina, Peru.
December	India, Pakistan.	Burma, Australia, Argentina.

Source: Food and Agriculture Organisation.

Although wheat can grow even within the Arctic Circle, the great wheat producing areas of the world are found in the temperate regions lying between 30°N and 60°N and 27°S. and 40°S. Wheat has also a wide altitude range. It can be successfully grown from sea level to a height of about 10,000 feet. It has been found growing even at 15,000 feet. For the most satisfactory growth and development of the grain, a cool, moist, growing season followed by a bright, dry and warm ripening period of six to eight weeks' duration with a mean temperature of slightly above 60°F seem ideal. Countries with severe winters and icy cold winds grow only spring wheat but countries with mild winters, with occasional snowfall, have both winter and spring

wheats. Lastly, countries with mild winters and summers grow only one crop of specially bred varieties during winter.

The total world wheat acreage has not shown any appreciable increase both during the pre-war and post-war years. The world acreage fluctuated within a narrow range of 7 to 10 percent in 1934-38. The share of the United States of America and China in total world acreage was over 30 per cent, while Pakistan contributed over 3 per cent of the total area.

In Pakistan wheat occupies the premier position in agriculture, both in terms of food crops as well as in the totality of agricultural production. In 1974-75, wheat accounted for 53.3 per cent of the total area under principal crops and 42.1 per cent of the area under food crops; wheat production in that year stood at 7 million tons which was 66 per cent of the total food crops. The world production of wheat in 1975 is estimated at 351 million metric tons. Of this Asian production is estimated at 90.5 million metric tons, Latin American at 11.5 million metric tons, Western Europe 53.55 million metric tons, Eastern Europe 26 million metric tons, Africa 8 million metric tons, Australia 10.3 million metric tons, Canada, 16.2 million metric tons, U.S.S.R. 84.5 million metric tons and U.S.A., 58.1 million metric tons.

The main problem of Pakistani agriculture is to grow sufficient wheat to meet the country's requirements and everything possible should be done to achieve this. The acreage, yield, production and imports of wheat in the past 25 years are indicated in Table 21.9.

TABLE 21.9

*Position of Wheat in Pakistan*

	1949-50	1954-55	1959-60	1964-65	1969-70	1972-73	1974-75
Acreage (000 acres)	10,337	10,530	10,055	13,140	15,393	14,754	14,397
Yield per acre (pounds)	836.4	664.2	713.4	770.8	1,033.2	1,107.0	1,082.4
Production (tons)	3,862,000	3,136,000	3,847,000	1,518,000	7,179,000	7,325,000	7,000,000
Imports (tons)	43,000	759,000	804,000	1,492,000	68,558	1,300,000	1,625,000

*Source:* Statistics Division.

In 1969 when wheat production was 7.179 million tons, Punjab accounted for 77.3% of total wheat production, Sind for 15.7%, NWFP for 5.2% and Baluchistan for 1.8%.

Government has announced that in 1977 all the 15 million acres or so under wheat will be sown with good quality certified seed which will make the country self-sufficient in wheat. Distribution and sowing of imported Mexican wheat seed will be arranged under official supervision. According to the Federal Food and Agriculture Minister (Sheikh Rashid) wheat output will be increased to 9 million tons as against the current consumption of 28.4 million tons.

Of its imported requirements Pakistan buys the largest quantity of wheat from the U.S.A. In 1974-75, Pakistan bought 465,000 tons of wheat, valued at \$75.3 million from the U.S.A. under the PL-480 agricultural commodities programme. PL-480 loans are repayable in 40 years at a low rate of interest and the sale proceeds of this wheat will be used by Pakistan for the rupee financing of development projects.

Table 21.10 indicates that Pakistan imported 1,624,962 tons of wheat through its own resources as well as various loans. Pakistan imported about 37.9 per cent of this wheat from its own resources.

Prime Minister Bhutto has issued directives that all the necessary inputs should be provided and all organisational arrangements should be complete to ensure a production of 8.4 million tons of wheat in 1975-76. The attainment of autarky in wheat would indeed be a worthwhile accomplishment of this regime.

TABLE 21.10

*Import of Wheat from various sources during 1974-75*

Source	Metric Tons
U.S.A. (PL-480)	3,91,924
U.S.A. (Cash)	4,15,843
Australia (Cash/Credit)	5,15,019
Australia (Food Aid Convention)	25,020
Sweden (Grant)	19,479
France (Food Aid Convention)	14,755
E.E.C. (Food Aid Convention)	27,922
E.E.C. (Cash)	2,00,000
West Germany (Food Aid Convention)	15,000
Total	16,24,962

The yield per acre of wheat in Pakistan is rather low by international standards. It was 1,107 pounds per acre in 1974-75 as against 2 to 3 times that much in the U.S.A., the U.K., Canada and Australia. The introduction of Mexi-Pak seed has added new dimensions to the increase in yields per acre of wheat. Mexi-Pak has established that it is a very efficient user of fertiliser and irrigation water and responds spectacularly when properly sown. Factors that increase yield would be research to learn how yields are increased, an extension service or informing the farmer about research, the supply of inputs such as improved seed, fertilizer, water, insecticides, mechanization, etc., and finally ensuring that the farmer accepts the research and inputs.

The Punjab with two-thirds of the wheat acreage and production has the strongest wheat research programme. Sind, with only one-sixth of the acreage and production of Pakistan, has added to its yield index faster than the other provinces because of its research effort and the fact that almost the entire wheat crop in Sind is irrigated, removing the rainfall factor in growing barani wheat, which tends to limit yields in the other Provinces. The North-West Frontier Province has not felt the impact of the new technology nor has Baluchistan where wheat cultivation is entirely dependent on water.

The potential of increasing wheat production by increased use of fertilizers has been emphasised by a foreign adviser:

"The area planted to wheat in Punjab province is about 11.1 million acres of which 8.3 million acres are irrigated. The Mexi-Pak varieties are grown on 5.2 million acres. If the recommended rates of fertilizer (120N and 60  $P_2O_5$ ) were applied to all the Mexi-Pak wheat this would require 280,000 tons of nitrogen and 140,000 of  $P_2O_5$ . In 1969-70, the fertilizer consumption for wheat in the Punjab was about 92,000 tons nitrogen and 11,000 tons of  $P_2O_5$ . Thus, additional fertilizers in quantities of 190,000 tons of nitrogen and 130,000 tons of  $P_2O_5$  would be required if the recommended rate were adopted for all Mexi-Pak wheat. This would give an additional production of 3.4 million tons of wheat. Putting the balance of the irrigated wheat acreage under Mexi-Pak and adopting the recommended fertilizer practices the production could increase another two million tons. With the present conditions one can estimate that there is scope for increasing wheat production 100 per cent if the new varieties and the recommended fertilizer practices are adopted for the irrigated wheat land in the Punjab. The required fertilizer quantities for this production will be about 450,000 tons of nitrogen and 225,000 tons of  $P_2O_5$ ."

Trials conducted by the Rapid Soil Fertility Survey and Testing Institute in the Punjab have determined that the grain/nutrient ration (which is the pounds of grain produced from each pound of the fertilizer nutrient applied) for  $P_2O_5$  ranges from 8.5 to 11 for a level of 50-60 pounds per acre of  $P_2O_5$ . Over a series of 375 tests on farmers' fields, the grain/nutrient ratio averaged 10 pounds of wheat for each pound of  $P_2O_5$ . The grain/nutrient ratio for nitro-

gen was 11 pounds of wheat for each pound of nitrogen up to a maximum of 150 pounds of nitrogen per acre. In terms of profitability, the value of the wheat/cost of fertilizer is a better criterion than grain/nutrient ratios. The value/cost ratio for nitrogen averaged 3.8/1 for applications of 120 pounds per acre of nitrogen. When a mixed fertilizer of nitrogen and phosphorus was used, the value/cost ratio increased to 4.4/1. Thus the farmer will expect Rs. 4.40 return in wheat for each rupee invested in fertilizer.

Wheat is a relatively drought resistant crop that has two (and possibly three) periods when moisture is critical. These would be germination, tiller initiation and grain filling. Research to determine the minimum water requirement and the critical periods of growth of wheat in Pakistan is being accomplished. When the results are in, then there should be a large and concerted effort to make the farmers aware of this knowledge and schedules of maximum canal flows, and tubewell electric power should coincide with these critical periods. This will involve the synchronization of planting within minor canal command and a secondary electric power distribution systems.

A substantial part of the wheat crop is procured at what is called the "procurement price" to provide wheat to the urban areas at what are considered reasonable prices. Generally speaking the ruling market price is anything from 50 to 80% higher than the procurement price. Apart from problems of equity which too mitigate against this practice, there is hardly any justification in asking the farmer to bear this heavy levy which has no relationship to ability to pay. The procurement price of wheat has varied from Rs. 9.50 per maund (82 pounds) in 1949-50 to Rs. 12.50 in 1958-59; in 1975 it was enhanced to Rs. 37 per maund as against the 1973-74 procurement price of Rs. 25.50 per maund. The procurement price was raised from Rs. 14.50 to Rs. 17.50 in April 1967 and it remained so for 5 years until 1972-73 when it was raised to Rs. 22.50.

A case can be made for fixing and supporting a floor price to ensure the farmer his cost of production and a fair return, but the rationale of relatively low procurement price is difficult to justify except on purely political grounds for keeping the vocal urban classes happy. The availability of fertiliser at a price which bears a fair relationship to the procurement price is necessary. The availability of the nitrogenous and phosphatic fertilisers at the right time should be ensured at the village level. Availability of the requisite inputs at the right prices supported by an incentive oriented pricing policy would ensure self-sufficiency and it is within the bounds of reason to expect that Pakistan could become a substantial exporter of wheat to the Middle East and South Asia.

**Rice:** Rice or *Oryza sativa* is one of the oldest cultivated and most widely produced cereals of the tropical and sub-tropical regions. About half the world's arable land is under cereals and about one-fifth of the total area of cereals is under rice. Six thousand varieties of rice are known to be cultivated in about 90 countries extending from 45°N to 40°S. High temperatures, abundant moisture and flooded fields are ideal for its growth. The largest rice areas are in deltaic regions or tracts subject to inundation by rain. It also grows in hilly regions provided the water supply is abundant and the summers are warm. More than half the world's population eats rice.

It is generally believed that rice cultivation in the Western countries began in early Grecian times. During Roman times it was an important food item of the people in the Mediterranean region, including Syria, Palestine, Egypt and the coastal areas of North Africa. Its cultivation in Europe began after the Muslim conquest of Spain. It is difficult to determine when its cultivation began in the Indo-Pakistan subcontinent. It is, however, mentioned in the Vedic literature of 1000 to 800 B.C.

The major rice producing countries are Pakistan, Bangladesh, India, Burma, Thailand, South Vietnam, Cambodia, South Korea, Japan, the Philippines, Egypt, Indonesia, Formosa, Malaya, Ceylon, Fiji, Tanganyika, the U.S.A., Australia, British Guiana, Mexico, Brazil, Italy, Spain, China and the U.S.S.R. The largest quantity of rice is produced in the South-East Asian countries particularly in India, Pakistan, Burma, Thailand, Indonesia and China. This is mainly due to favourable climatic factors. Methods of rice culture and its quality vary widely and thousands of varieties of rice are grown. Though Asia produces the largest quantity of rice, the yield per acre in this region is generally low. Acre yield in Pakistan (1,238 pounds) compares

unfavourably with those of Spain (3,531 lb), Italy (2,717 lb) and Australia (2,464 lb). The absence of scientific farm practices, lack of fertilisers, high incidence of crop pests and to an extent the land tenure system are among the main causes of low yields. Possibilities of increase in acre yields in this region are bright and constitute a hope for the future.

The rice grain is covered by a hard outer hull or husk with small needle-like hair. The husk is high in silica content. The husk can be used as a fuel. Its ash is a fertiliser of low value. The husk has two inner glumes and two outer glumes. It is not a suitable feed for its abrasive qualities but it may be used in ceramic and cleaning soap industries.

The kernel is covered by bran layers inside the husk. The first layer is a thin cover consisting of the remains of the ovary walls (seed coat or pericarp). The bran, in the fully ripe rice is usually of a light brown colour. Rice before the removal of the bran is known as 'brown' or cargo rice. Some varieties have bran of different colours. At one end of the kernel and lying within the bran layers is the germ or embryo. This part is generally removed along with the bran in the milling process. Rice bran, including the germ, has a high nutritive value and is thus an important and valuable livestock feed. Next to the bran there is a layer of an appreciably different material known as the aleurone layer which is rich in nutrition. The starchy core of the kernel after removal of the layers described above is the white or creamy grain used as table or milled rice.

Rice is not a complete food even in the whole unmilled condition. Whole rice and wheat, however, contains almost the same amount of nutrients and caloric value. Per unit cultivated area, the caloric yield of whole rice is usually higher than that of wheat, mainly due to higher acre yields. Main nutrients in rice are:

(a) Protein content.—The quality of rice protein is good and digestible but is lower than that in most varieties of wheat.

(b) Vitamin content.—Whole rice compares well with whole wheat as a source of water soluble vitamins (thiamine and niacin which are important for the prevention of 'beriberi' and 'pellagra'). Wheat has a higher thiamine and tocopherol content.—Vitamin E and riboflavin. The amount of fat soluble vitamins A and D in rice are negligible and ascorbic acid and Vitamin C do not practically exist.

(c) Fat and other contents.—Rice, like wheat, is a poor source of fat. Milling removes most of its fat. In its mineral content, rice resembles other cereals. It is poor in iron and calcium.

The usual varieties, qualities and types under the broad groupings are:—

- (a) Fine, medium and bold (or coarse),
- (b) Raw and parboiled and
- (c) Machine milled and hand-pounded rice.

Rice may also be judged by its characteristics like:

- (a) Translucency or chalkiness (b) colour, (c) polish (d) fragrance or aroma, (e) uniformity in size and shape, (f) age of maturity and (g) cooking quality.

In Pakistan the main qualities are Basmati, IRRI 6 and IRRI 8. Its price is also governed by its physical qualities like the presence of:

- (a) Foreign matter and impurities.
- (b) Broken grains.
- (c) Damaged and defective grains.
- (d) Red grains.
- (e) Chalky grains.
- (f) Weevilled grains.
- (g) Admixture of other varieties of rice.

Cultivation of rice is a laborious task. This is because the crop thrives best when transplanted and in high temperatures and abundance of water. The working conditions are more hazardous. Due to moisture the cultivator is more prone to malaria and other such diseases. These factors make the labour costs high. Rice is also sown broadcast, as in some parts of Bangladesh, and this is probably one of the reasons for the low average yields. Broadcast

sowing is not common in certain countries. In Burma, for example, only about 5% of the total area is sown broadcast. The bulk of the rice in Indo-China, Thailand and China is transplanted. In Pakistan almost the whole of the crop is transplanted. In Bangladesh it is both transplanted and sown broadcast. For better production and higher yields transplantation is necessary.

Pakistan is now a major rice exporting country, ranking among the first 10 in the world. It is the only rice-exporting country that does not have a system of milled rice grades and a system of paddy rice grades to back up this system at the production level. It is never likely to reach the maximum success as a rice exporter until a system of objective readily-accepted grades is established so that farmers and millers are encouraged to produce good quality rice and are paid according to quality, and export is undertaken according to internationally-recognized grades rather than the slow expensive subject-to-fraud approach of visual samples.

Generally, millers and traders and agricultural leaders in the industry in Pakistan feel that the situation is so different in Pakistan that objective grades cannot be established. This is not true. Established rice grades are used in other developing exporting rice countries, such as Thailand, Burma and Egypt, as well as in old-established exporters, such as the United States, Brazil and Australia. They can be established and accepted by the industry in Pakistan if sufficient emphasis is given to the problem.

Much of the difficulty in producing quality rice lies in the area of inferior milling. The ultimate solution would be to have a few 25 to 50-ton per hour bulk-handling completely mechanised computer-operated mills, such as exist in the United States or Australia. In the meantime, the current solution in Pakistan is the improvement of existing mills and the addition of a few new modest-size modern mills where the expansion of production justifies it.

Three major approaches appear indicated for the improvement of the milling of rice in Pakistan. Most of the rice is milled in simple huller mills in local villages. These huller mills produce poor quality rice but are cheap to operate and inexpensive to purchase, and will continue to be used for many years to come. They also supply employment to many people and their sudden elimination would cause severe distress. Thus the first approach to improvement is to assist existing huller mills to produce better quality rice with the equipment they now have. This is possible by a good education programme and assistance programme to advise them on the best ways to adjust the mills for maximum performance and the possible ways to improve the quality of saleable rice by the use of screens and mechanical cleaners to remove broken grains and impurities. In effect, an extension programme for the thousand or more huller mill operators is suggested.

Second, there are numerous sheller mills that have been established in Pakistan in recent years. This is a good move; sheller mills produce a higher total percentage of usable rice from a given amount of paddy than does the huller mill, and the proportion of broken grains is reduced by about one-half. Assistance should be provided to make it as convenient as possible for huller-mills operators to convert to sheller mills, and if necessary, provide intermediate term loans to make this conversion.

The Kala Shah Kaku and Dokri rice research centres are doing useful research work. The research work on the breeding and selection of new varieties, crop rotations, plant nutrition, time of planting and transplanting, transplanting as compared with broadcasting, insect control, water management, and similar physical studies is impressive. Thanks to this research work, there are available new varieties with a shorter growing season to permit the planting of a winter crop after rice in the Punjab, new varieties that have good yield potential and higher quality characteristics than those now being planted, new Basmati selections that show promise of producing higher yields and having more resistance to the stem borer, and other similar improved types. The cultural control practices have given farmers the opportunity to reduce labour and water costs without sacrificing yields. The seedling rate studies have assisted in seed cost savings without sacrificing production rates. All of these and other similar examples indicate the pay-off from a good research programme.

The importance of rice in Pakistan's economy is indicated in Table 21.11.

TABLE 21.11

*Rice Acreage, Production and Exports*

	1949-50	1954-55	1959-60	1964-65	1969-70	1972-73	1974-75
Acreage (000 acres)	2,305	2,369	2,974	3,350	4,008	3,656	3,866
Yield (pounds per acre)	770.8	770.8	877.4	885.6	1,353.0	1,402.2	1,238.2
Production (tons)	792.0	825	979	1,329	2,346	2,293	2,150
<b>Exports:</b>							
(i) million rupees	N.A.	20.244	68.288	120.397	93.9	1,136.1	1,871.9
(ii) 000 tons	N.A.	77,015	117,142	180,156	89,478	776,415	370,658

Rice is now a major source of foreign exchange earnings and is taking on the significance of a cash crop. The tremendous margin of difference between the export prices and procurement prices of rice has caused a good deal of discontent amongst the larger farmers. Although the procurement price of rice has been raised in 1975 from Rs. 62, per maund to Rs. 90 per maund in the case of Basmati, from Rs. 27 to Rs. 40 per maund for Begmi Irri 6, from Rs. 26 to Rs. 39 per maund of Kangni and Joshi and from Rs. 25 to Rs. 38 per maund for Irri 8, yet the procurement price level is far below the export prices. For the future the most serious problems for rice will be in the area of marketing and here quality control is going to be a major factor if Pakistan is to retain its export markets. As more than 50 per cent of the world's population has a preference for rice the outlook is by no means dim.

d) **Sugarcane:** The development of sugarcane is indicated in Table 21.12.

TABLE 21.12

*Sugar-cane*

	1949-50	1954-55	1959-60	1964-65	1969-70	1972-73	1974-75
Acreage (000 acres)	542	752	980	1,243	1,532	1,318	1,655
Yield pounds (per acre)	31,660	25,953	2,390	22,988	3,781	33,234	28,290
Production of sugar-cane (tons)	7,725	8,696	10,494	18,373	25,952	19,632	21,000
Production of manufactured sugar (000 Tons)	16,000	48,000	83,000	156,000	600,000	426,000	451,000

Source: Ministry of Food and Agriculture and Statistics Division.

Sugar-cane or 'saccharum officinarum' is at present the only source of sugar in this country. Its rival, the sugar-beet, is still not fully established in Pakistan. Judging by the recognized standards of consumption which varies from 2 to 6 oz. per head per day according to the age groups, the production of sugar in Pakistan is not adequate. The question, therefore, remains how to step up production and to what extent. Considerable progress has been made to set up an industry to manufacture white sugar in the country.

Though traces of sugar are found in most of the consumable vegetables and plants, commercially the two main sources of sugar are sugar-cane and beet. The choice between the cultivation of cane or beet depends essentially on the agronomic conditions prevailing in a particular area.

The chief sugar-cane producing countries in the world are: Cuba, Brazil, United States, Australia, Puerto Rico, Taiwan, India, Pakistan, the Philippines, and the Union of South Africa. Sugar-beet is grown in the Soviet Union, France, Federal Republic of Germany, Eastern Germany, United Kingdom, United States, Turkey, Poland, Czechoslovakia, Spain and Hungary. Broadly speaking, the cultivation of sugar-cane is confined to the tropical and sub-tropical regions.

The yield of sugar is determined by the out-turn per acre of cane or beet, its sucrose content and the extraction percentage. The variations are more pronounced in the case of cane than of beet sugar. The yield per acre varies widely in different countries.

The smallest yields for cane are reported from Brazil, India and Pakistan. The low figure for India and Pakistan is partly accounted for by the low yield of country-made 'gur'. The production of beet sugar per acre is generally lower than that for cane; beet is produced under less varied conditions and its sugar yield does not vary as much.

The low acre yield of cane in Pakistan may be due to poor cultivation methods, incidence of disease and pests, inadequate use of fertilisers, inadequacy or uncertainty of water, too much ratooning of cane, poor seed and above all the vagaries of nature. Low yield in certain parts of Pakistan also results from lack of care of the ratoon crops (from the same roots) after each harvest. The ratoon crop is generally considered an extra crop. The yield from the ratoon crop is lower than that from the plant crop. Experiments have, however, shown that some of the ratoon crop, if properly looked after, yield quite good results.

In Pakistan only part of the cane is utilised for the manufacture of white sugar and the rest is used for manufacturing 'gur' and unrefined sugar. Gur making by customary methods is rather wasteful. The extraction of juice by crushing is about 65 per cent. Only about 50 per cent of the sucrose available in cane is recovered against 82 per cent with modern methods. The loss in the manufacture of 'gur' is about 8.5 per cent on the weight of sugar in cane against 2.5 per cent in modern factories. Fuel too is wasted. Some matter is charred and burnt in the heating process. The keeping quality of 'gur' which is more hygroscopic is not as good and therefore its deterioration is more rapid. Sugar-cane is also used for various other purposes, viz., seed, chewing and cattle feed. The deterioration in sugar-cane and sugar production in Pakistan during the first half of the seventies has been attributed to shortage of water for irrigation (the sugar-cane crop has a relatively large water requirement as compared to other crops), damage by the sugar-cane borer, and the adverse effects of frost on the sugar plants.

Extensive damage is caused to the crop by pests and diseases. The more common types of pests found in Pakistan are the stem borer (*argyria sticticrasis*), pyrrilla (*pyrrilla perpusilla* or *pyrrilla pusana*), bug (*macropes excavatus*), top-shoot borer (*scirphphaga mivella*) and root borer (*emmalocera depressella*). The menace of pests and insects can be effectively controlled by spraying the cane at the proper time during the life cycle of the insect. Various types of chemicals are used for the control of insects and pests. The use of any one particular insecticide depends upon the killing efficiency of the chemical on the particular insect, method of application etc. Common diseases that are generally found in sugar-cane are red rot (*colletotrichum falcatum*), smut (*ustilago acitaminea*), stem canker (*cytospora sacchari*), leaf spot (*leposhairia sacchari*), rust (*ruccinia kuchnii*), mosaic (virus) and chlorosis (physiological).

Cane is the main source of sugar in Pakistan and will probably remain so. There are, however, areas in the former Punjab and N.W.F.P. with soil and climatic conditions quite favourable for beet growing. Only in a few countries are both these crops grown. As the harvest season is short, a factory would not run economically on beet alone. Beet can be processed in the existing cane sugar factories if suitably equipped for this purpose. The harvesting season of beet closely follows that of cane and the factory can take to beet as soon as the cane supply runs out. This would extend the operating season of the factories by two to three months and reduce factory overheads and the manufacturing cost of sugar. It should be noted that the average recovery of refined sugar from sugar-cane in Pakistan is 7.5 to 8.5%



as against 12 to 13% in Cuba, Puerto Rico, South Africa, Australia, Japan and the Philippines.

The availability of sugar-cane depends considerably on the price paid for it. The procurement price of sugar-cane has been doubled in the past three years. The procurement price was increased by one rupee per maund for the 1974-75 crop and it was fixed at Rs. 5.25 per maund for Punjab, Rs. 5.40 per maund for Sind and Rs. 5 per maund for NWFP.

### WORLD'S MOST IMPORTANT FIBRE

**Cotton:** Cotton is the world's most important fibre having a large variety of uses. Good quality cotton is produced in sub-tropical countries lying between 30 degrees North and 30 degrees South. The main cotton producing countries are the U.S.A., USSR, India, Brazil, China, Egypt, Pakistan, Mexico, Uganda, Nigeria and Tanganyika. In 1974-75 Pakistan produced about 10% of the world's total production of 62.7 million bales (of 392 pounds each) and about 30% as much as the USA. Including the 25 million bales carry-over from the previous year the total world supply in 1974-75 is estimated at 87.7 million bales. While U.S. production declined by 13% in 1974-75, that of the USSR and Mexico increased by 1.1 and 0.7 million bales respectively. The bleak outlook for the disposal of 87.7 million bales of cotton has been aggravated by the decline in demand in Europe, Japan and Hongkong and there is likely to be a carry-over of about 29 million tons. Raw cotton prices have fallen while production costs (particularly those of fertilisers) have increased due to the rise in oil prices. This should lead to diversion to other crops during 1975-76; soyabeans is a rather attractive alternative.

A noteworthy feature of cotton production is that this crop is either being planted or being harvested practically every day of the year. Seasonal operations in a few important producing countries are given below:

#### *Planting and Harvesting Seasons in Various Countries*

Month	C O U N T R I E S	
	Planting	Harvesting
January	North Brazil, Nyasaland, Tanganyika	South India, Kenya, Sudan, Uganda.
February	Mexico, Egypt	Argentina, Peru, Sri Lanka.
March	U.S.A., China, Iraq, Syria	South Brazil, Indo-China, Queensland.
April	East Indies, North India, Iran, Somaliland	Columbia, Paraguay.
May	Venezuela, Pakistan, St. Vincent	Bolivia, Argentina, Rhodesia.
June	Granada, Thailand, Kenya	Tanganyika, Union of South Africa.
July	Salvador, Sudan	Mexico, East Indies.
August	Leeward Islands, South India	North Brazil, Iraq.
September	South Brazil, Peru, Queensland	U.S.A., North India.
October	Bolivia, Sri Lanka, Indo-China	Pakistan, Montserrat, Iran.
November	Rhodesia, Union of South Africa, Fiji	Salvador, Venezuela, Nyasaland.
December	Paraguay, New Caledonia	China, Leeward Islands.

After wheat, the cotton crop occupies the largest area of the total cultivated land in Pakistan. It is grown on an area of over 5 million acres.

On the basis of the average number of persons per acre engaged in farming, the area under cotton provides a direct means of livelihood to about a million people, who, with their families, provide support to over four million persons. The number of other persons who depend indirectly on the cultivation of cotton in the villages would run into several hundred thousand.

To gin the cotton crop produced in the fields, the ginning and pressing factories, numbering about 352, represent one of the largest single seasonal industries of the country. They employ thousands of workers and provide means of livelihood to several times that number. Cotton

also supports seed crushing, and the spinning and weaving industries. The latter is the biggest consumer of cotton in Pakistan and provides direct employment at the plant, to over a quarter of a million workers—skilled, semi-skilled and unskilled. Apart from this, it has opened up avenues of employment to a very large number of persons employed in related enterprises.

Cotton is one of the principal items of export. Cotton textiles and allied products account for about 60 per cent of annual export earnings and Pakistan has further export potential which has yet to be explored and which could multiply our foreign exchange earnings besides providing livelihood to an additional labour force and improving the standard of living of over 70 per cent of the agricultural population.

At the time of Independence, Pakistan's share in cotton was 20 per cent of the area and 40 per cent of the total production of British India. It indicated a higher per acre yield of cotton in Pakistan. In 1946-47, the area and production of cotton in India comprised 11.67 million acres and 2.12 million bales as against 3.25 million acres and 1.39 million bales in Pakistan.

Both Desi and Pak-upland varieties of cotton are grown in Pakistan. Almost 90 per cent of the total cotton cultivated area and 94 per cent of the total output are that of Pak-upland varieties. Desi cotton forms only about 10 per cent of acreage and 6 per cent of the production.

Cotton is grown in a well-defined belt, north to south along the Indus Basin. Some of the important cotton growing districts are Multan, Bahawalpur, Sahiwal, Lyallpur, Hyderabad, Tharparker, Sanghar, Nawabshah, Rahimyar Khan, Sargodha and Jhang. These districts account for more than 85 per cent of the cotton acreage.

It is planned to increase the production of cotton in Pakistan to 6.2 million bales by 1980 through increase in yield per acre, by intensified research, and a greater application of modern cotton production technology. This would have to include improving the yield component (the boll size in Pakistan needs about 180 boll for one pound; white high producing upland varieties require around 65 boll for one pound); improving plant architecture by reducing the excessive vegetative branches; hybridisation with early maturing types; improving strength of fibre quality particularly above certain lengths, that is, 1/8 inch; improving the quality of seed and carefully grading them; and use of varieties which can effectively utilise the water and fertiliser inputs.

Table 21.13 indicates the development of acreage, yield, production and exports of raw cotton as also cotton manufactures in the last 25 years. Acreage under cotton, yield per acre, and total production have shown a rather consistently upward trend. This is reassuring. Acreage has gone up from 2.744 million acres in 1949-50 to 4.338 million acres in 1969-70 and then to 5.019 million acres in 1974-75.

Yields per acre have improved from 98.4 pounds in 1949-50 to 188.6 pounds in 1959-60, 270.6 pounds in 1969-70 and then to 319.8 pounds in 1973-74; in 1974-75 it fell to 278.8 pounds. Yield on cotton in Pakistan are low by international standards. In the USSR the yield is 729 pounds per acre, in the USA 484 pounds, Turkey 480 pounds, Egypt 520 pounds, and Mexico 618 pounds.

Production of cotton increased from 1.239 million bales in 1949-50 to 1.639 million bales in 1959-60, 3.105 million bales in 1969-70 and nearly touched 4 million bales in 1972-73; in 1974-75 it fell to 3.567 million bales. With all the development of the textile industry and with an approximately threefold increase in cotton production foreign exchange earnings from exports of raw cotton and cotton manufactures were only slightly higher in 1974-75 as compared to 1949-50. Increase in internal consumption and an adverse movement in the trend of export prices would explain this paradox.

TABLE 21.13

*Cotton, Acreage, Yield, Production and Exports*

	1949-50	1954-55	1959-60	1964-65	1969-70	1971-72	1972-73	1973-74	1974-75
i) Acreage (million acres)	1.744	3.136	2.318	3.624	4.338	4.837	4.967	4.559	5.019
ii) Yield (pounds per acre)	98.4	205	188.6	229.6	270.6	319.8	311.6	319.2	278.8
iii) Production (million bales of 392 pounds each)	1.239	1.583	1.639	2.124	3.015	3.979	3.947	3.704	3.567
iv) Exports (million bales)	0.97	0.73	1.079	1.64	0.47	1.1	1.214	0.216	1.178
v) Exports (million rupees)	3971.4	296.5	188.8	287	209.7	954.8	1.167	376.1	1730.8
vi) Export of yarn and cloth (million rupees)	0.3	1.28	231.3	271.2	511.6	1736	3076	2262	2388.8
vii) Total exports of raw cotton yarn and cloth (million rupees)	3971.7	297.78	420.1	558.1	721.3	2690.8	4243	2638.1	4119.6

*Source : Statistics Division.*

Cotton prices are highly sensitive and they are determined by the internal forces of demand and supply. Minute-to-minute changes in prices are reflected in transactions at cotton exchanges in all the main commercial centres of the world. No private cartel or a cartel of producing states can really control its price to any substantial degree owing to the existence of viable substitutes like polyester, viscose rayon and dacron. Prices can only be supported internally at a certain level if the government concerned is prepared to foot the bill. Even here there is a practical limitation. If a country like Pakistan has a well-established textile industry, a substantial part of whose production is exported, the textile mills will not be able to compete in the international market if they are required to buy raw cotton at a price which is in excess of the world price. Pakistan has actively supported internal prices at a level which was sometimes higher than warranted by world prices. In 1974 the support price was Rs. 100 per maund of seed cotton. Surplus cotton is being exported through the Cotton Export Corporation.

**Forestry:** The contribution of forestry to the GNP in Pakistan is indicated in Table 21.14 over the last 25 years.

TABLE 21.14

*Forestry*

	1949-50	1954-55	1959-60	1964-65	1969-70	1972-73	1973-74	1974-75
(i) Contribution of forestry to GNP at constant factor cost of 1959-60 (million rupees)	71	94	28	46	48	91	89	89
(ii) Contribution of forestry to GNP at current factor cost (million rupees)	40	64	28	46	367	100	253	362

*Source:* Statistics Division.

Forests constitute only about 4.59 per cent (13,790 sq. miles) of the total area of the country (310,400 sq. miles) as against the desired forest-land ratio of 20 to 25 per cent for a balanced economy. Forests are a very valuable resource. They provide the much needed timber. Inferior timber is required for use as a fuel in the rural and smaller urban communities. Presently, this source provides just about 10 to 20 per cent this need and the rest is secured from cowdung (a much needed manure), agricultural refuse, fellings on private land and brushwood. A project was launched in 1966 for raising plantations under canal irrigated conditions over an area of about 260,000 acres commanded by the Ghulam Mohammad Barrage, Taunsa Barrage and Guddu Barrage. It should be completed by 1976.

The absence of adequate forest cover is known to aggravate the problems of floods and soil erosion. In some countries afforestation has created favourable conditions for desert farming, and Pakistan needs more trees to be able to put its arid lands to productive use. Waterlogging can be controlled to some extent by planting trees with a high water intake. Trees planted along the banks of canals offset the seepage of canal water, which raises the water table and contributes to the menace of Thur (salinity) and Sem (waterlogging). At present there are linear plantations along 8,964 miles of canals, 10,805 miles of roads and 306 miles of railway lines.

Reckless felling of trees and their destruction by goats uprooting and devouring the underbrush, leading to soil erosion (sheep only nibble the tops) as well as lack of care after plantation have often tended to nullify the developmental effort. As such, besides planting more trees, we need more effective conservation of the present forest wealth. Many forests have disappeared altogether. In the northern areas one hill after another has been denuded of trees. Conservation of forests is, therefore, of much importance as afforestation. Government has offered new incentives for the planting of trees, and these include ADBP loans to private parties. However since growing of trees is not usually treated by agriculturists as commercially rewarding, the ADBP will have to make sure that loans advanced for afforestation do serve their purpose. It is estimated that even with an increase of 50,000 acres per year it will require about 100 years to raise the present meagre forest area by another 2.5 per cent and even that will remain much below the desired level. The country will have to continue to import large amounts of timber.

**Fisheries:** The contribution of fisheries to the GNP in Pakistan over the last 25 years is indicated in Table 21.15.

TABLE 21.15

*Fisheries*

	1949-50	1954-55	1959-60	1964-65	1969-70	1972-73	1973-74	1974-75
(i) Contribution of forestry to GNP at constant factor cost of 1959-60 (million rupees)	866	979	1,111	91	170	128	115	118
(ii) Contribution of forestry to GNP at current factor cost (million rupees)	429	580	71	127	233	379	476	565

*Source:* Statistics Division.

Fish can make up the protein deficiency among the poor masses. Besides fish is also an important foreign exchange earner. It earned 153.2 million rupees in 1974-75, and 350 million rupees in 1973 as against 48.6 million rupees in 1969. In view of the high prices of meat and poultry, efforts are being made to increase fish production from the inland and marine waters. Fish production increased from 214,000 metric tons in 1973 to 224,000 metric tons in 1974 and is estimated at 230,000 metric tons in 1975. The Fisheries sector is expected to register a growth rate of 2.6 per cent during 1974-75. The development programme in the Fisheries Sector aims at increasing fish production and providing marketing facilities. The repair and restoration of fisheries installations damaged by the floods of August-September 1973 have been taken up in the Punjab and Sind

The development of inland fisheries has been intensified and the fisheries research and production programmes in village ponds, dams, reservoirs, lakes, and roadside depressions in the Punjab have been initiated. The development of riverain fisheries for promoting sport fishing has been taken up, while fish culture is being developed in lakes, and in some waterlogged areas of the Punjab.

The production of fish increased from 43,000 metric tons in 1947 to 233,000 metric tons in 1973. Of the 1973 catch, inland fisheries only accounted for 10.7% of the total. It is absolutely necessary to depoliticise the fish industry. If those who process fish are compelled to buy the raw material at prices which bear no relationship to the international prices then the whole industry, which has grown rather well in the past few years will have to be closed down or nationalised. In the latter case government would again be required to pay large subsidies or face confrontation with the fishing folk.

**Livestock:** The contribution of livestock to the GNP in Pakistan over the last 25 years is indicated in Table 21.16.

TABLE 21.16

*Livestock*

	1949-50	1954-55	1959-60	1964-65	1969-70	1972-73	1973-74	1974-75
(i) Contribution of Live-stock to GNP at constant factor cost of 1959-60 (million rupees)	2,975	3,347	2,837	3,121	4,440	3,651	3,724	3,794
(ii) Contribution of Live-stock to GNP at current factor cost (million rupees)	2,853	2,978	2,837	3,199	4,547	6,169	8,247	9,616

Source: Statistics Division

Livestock development is vital for the country as it provides draught power, milk, meat, wool, etc. As the production of animals could not keep pace with the increase in human population and per capita income, the prices of meat, milk and eggs rose substantially. Special attention is being given to improvement in the supply of meat, milk, eggs etc. In this connection, both long and short-term measures have been taken by the government to rise livestock and poultry production and ultimately to stabilize the prices of meat, eggs and dairy products.

Long-term measures include improvement of breeds for milk, meat and wool production on the existing state farms and also on new farms being set up both in the public and private sectors. Besides this, quality bulls and rams and greater facilities for artificial insemination are being provided to the private sector. Proper attention is also being given to such measures as improvement and expansion of facilities for prevention and control of diseases, opening of new veterinary hospitals and dispensaries and the setting-up of diagnostic laboratories at focal points for increasing production in the short term.

In the Punjab, a programme was initiated for large-scale production of milk, meat, poultry, butter and by-products and forage during 1973-74. Under this programme, improvement of breeds for milk, meat and wool production was continued on the existing state farm and five new farms were opened during 1973-74 in the public sector and another six farms are being established during the current year. Artificial insemination coverage is to be provided to about 1,00,000 cows/buffaloes during 1974-75 as against 15,000 in 1973-74.

The cows and buffaloes are brought to Karachi for milk production from Upper Sind and the Punjab. When the cows and buffaloes go dry, they are sold to the butchers by the milkmen. Under a scheme for the conservation of superior dry cows/buffaloes, advancing of loans has been arranged to the private breeders up-country for the purchase of buffaloes from the Landhi Cattle Colony.

In Baluchistan, the existing sheep breeding and research station of Loralai district is being expanded during the current year to increase meat and wool production. In the NWFP, the breeding facilities have been further improved during 1974-75 to increase production potential of milk, meat and wool. A programme of purchasing 50 breeding bulls and another 220 to be maintained on subsidy during 1974-75 has been chalked out in the province as against 50 bulls purchased and 165 maintained during 1973-74.

An attempt has been made to export eggs and poultry meat during the summer months, encouragement is being given to the poultry producers. Hatching of eggs and cockerels and their supply at subsidized rates in rural areas is also under the consideration of the government.

Man and animal compete for existence on land; the increasing pressure on land by both will present serious problems in the maintenance of an increased number of animals. Planning emphasis is, therefore, being shifted from cattle to the buffalo for increasing overall milk production. Goat and sheep will be developed in the suitable tracts, primarily for meat and wool. Increase in the off-take rate (slaughter) will reduce the number of old and uneconomical animals. The younger stock will be better fed and fattened to produce more milk and meat, as proposed below. The poultry population by 1979-80 is expected to double. All these changes should result in improvement per capita protein consumption as will be observed from the data in Table 21.17.

TABLE 21.17

*Livestock Production and Per Capita Consumption*

Name of Product	1973-74		Percentage increase in total production	1979-80	
	Total production	Annual per capita consumption		Total production	Annual per capita consumption
Milk	7.2 million tons	125 kg	27	9.90 million tons	127 kg
Meat	0.25 million pounds	9 pounds	50	0.37 million pounds	10.6 pounds
Eggs	600 million dozens	9 Eggs	100	1200 million dozens	15 eggs.
Poultry Meat	24 million pounds	8 ounces	100	68 million pounds	14 ounces

The long and continuing shortage of foodgrains and increasing competition for land use between human population and the animals have resulted in deterioration in the health, vigour, and reproduction of livestock. Now that foodgrains self-sufficiency appears to be in sight, the next step should be to solve the feed and fodder problems. Instead of a feed subsidy, the funds should be diverted for the introduction and propagation of seeds of high yielding varieties of foodgrains, fodder crops and grasses. It has been estimated that if crop production targets aimed at self-sufficiency in basic foods are achieved, the residue and by-products for livestock feeding would be sufficient for an overall increase of 20 per cent in livestock production by 1980, and of 50 per cent by 1985. It has been further estimated that a 50 per cent increase in milk production would require an additional feed of about 6.4 million tons of TDN. The provision of more feed mills in the concentrated livestock population areas where agricultural wastes could be utilized and cheaper poultry and cattle feed could be available to the breeders and dairy is called for.

## The Food Problem

Food is the most important single item in human subsistence, and man the most important living organism. The problem of food supply for man is as old as man himself. Throughout the historic past man has sought food from the mother earth in various forms and by various methods. He still follows the professions of his ancestors; he is a hunter, a pastoralist and an agriculturist. Like all other problems this too has two sides—a demand side represented by growing population and a supply side represented by the agricultural and allied activities which are the main source of food supply. For a thorough analysis of this problem, the progress of population has to be interpreted in terms of cultivated land and food supply available on a per capita basis.

Pakistan inherited an agricultural economy, a gift of the rivers. The ancient civilizations of historic 'India' grew along the valley of the Indus where the art of agriculture and irrigation was well developed for those times. With the march of time man in our part of the world seems to have made little progress in the agricultural industry which requires a scientific approach. As the population of our country grows, the matter of food supply no more remains a simple affair. A small untoward happening like floods, failure of rainfall or shortage of water-supply from canals results in food shortages which have to be met by imports.

The food problem has aroused the international conscience to quite a high pitch. The question of establishing a World Food Reserve was discussed threadbare in the UN Economic and Social Council in which the author was privileged to participate. The four main-objectives of this Reserve were significant inasmuch as they were directed against eliminating hunger and "poverty in the midst of plenty":—

- (i) Raising low levels of food production and consumption, and fighting chronic malnutrition;
- (ii) Relieving famine and other emergency situations;
- (iii) Counteracting excessive price fluctuations;
- (iv) Promoting the rational disposal of intermittent agricultural surpluses.

It was during these discussions at the ECOSOC that the idea was mooted for establishing national food reserves. Countries living near the margin of subsistence are particularly vulnerable to famines due to crop failure and other emergency causes. Provision against these dangers calls for the maintenance of adequate national reserves, which can be brought into action at an early stage of the emergency, before panic and hoarding aggravate the plight. Moreover, quite apart from the threat of emergency food shortages, poor countries also are particularly prone to suffer from the destabilizing effects on their economics of frequent supply/demand changes and of resulting sharp and excessive fluctuations for basic foodstuffs. These economic disturbances could be lessened on certain conditions, by the maintenance of adequate national reserves. Yet, because of their poverty, the countries most in need of protection against famine and instability also are the ones least able to afford the diversion of part of their meagre resources from current consumption to the building of stocks. Thus international assistance for building up national food reserves takes on an added significance.

Despite the fact that food is a necessary ingredient for human survival, leave alone efficient production, economists and planners in both affluent and developing nations tended to minimise the importance of the food problem. The situation is now changing and even the oil rich LDCs are endeavouring to increase their food production potential.

The per capita availability of foodgrains in Pakistan is indicated in Table 21.18. In Pakistan as it then existed consumption increased from 14.90 ounces per day in 1949-50 to 15.13 in 1953-54 and then fell sharply to 12.51 in 1954-55. In 1955-56 it further fell to 11.53, the lowest ever. In the present day Pakistan it stood at 13.43 in 1959-60. It increased to 15.31 in 1969-70 and during the three years 1972-73 to 1974-75 it has been 15.97, 15.75 and 15.78 respectively. These per capita estimates include all foodgrains—wheat, rice, maize, bajra, jowar and barely.



TABLE 21-18

*Per Capita Availability of Foodgrains*

[Columns (i) to (v) in 000 tons]

Year (July-June)	Domestic Production	Allowance for seed, animal feed and wastage at 10%	Imports	Exports	Availability for consumption (Imports+Pro- duction-Ex- ports)	Population (million)	Per capita consumption (in ounces) per day
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
1959-60	6,013	602.3	804	56	6,159.7	50.03	13.43
1960-61	5,948	594.8	1,062	148	6,267.2	46.2	13.32
1964-65	6,781	678.1	1,492	181	7,413.9	51.76	14.06
1967-68	7,300	730	1,419	116	7,873	56.37	13.71
1969-70	10,187	10,18.7	227	87	9,308.3	59.7	15.31
1972-73	10,466	1,046.6	527	335	10,611.4	65.24	15.97
1973-74	11,321	1,132.1	1,168	575	10,781.9	66.01	15.75
1974-75	11,112	1,11.2	1,625	500	11,125.8	69.21	15.78

*Source:* Statistics Division.

In a poor country like Pakistan the availability of essential food items of acceptable quality at a reasonable price, which is within the reach of the poorest sections of the community, is the single most important duty of all members of the society, be it government, producer, distributor, wholesaler or retailer. Essential food items would include the following: foodgrains, pulses, cooking media, milk, tea, sugar, meat (including fish), vegetables particularly potato, salt and spices. Eggs and poultry can also find a place in this list, particularly for urban areas, and so probably could fruits. Emphasis should also be placed on the nutritional habits of the populace with a view to providing a more wholesome and balanced diet. A 2,234 calorie diet was suggested for 1974-75 composed of foodgrains (1672 calories), fats and ores (76 calories) and other sources (486 calories); and proteins from fats (24 grams) and from plant and animals sources (52 grams). This may perhaps be a far cry so far as the immediate food problem is concerned; nevertheless it should be kept in view for any long-term planning. Inflationary increases in the prices of food items cause great distress and it is a matter of small consequence and concern for the man in the street if inflation has been occasioned by devaluation, impact of international economic forces, economic and administrative mis-management, or even for the loftier consideration of calling upon the present generation to make greater sacrifices for the future economic strength and glory of the country.

The fate of many a government has rested on an acceptably satisfactory solution of the food problems and the future of many a leader has foundered on the rocks of a half-filled stomach. In fact the fate of South Asia hangs in the balance on the capability of its rulers to resolve this problem. If democratic and planned economic institutions cannot provide two square meals a day to every man, woman and child, they are likely to be replaced by authoritarian regimes which, while stifling human freedom, provide the wherewithals of physical human satisfaction. Man may not live by bread alone, but he certainly cannot live without it.

### Agricultural Inputs

Without land there can be no activity and without the availability of land of suitable qualities in adequate quantity there can be no agriculture. Under this input consideration should also be

given to soil conservation, barani lands and range management.

Water and its related problems are the most significant factors inhibiting agricultural growth in Pakistan and they need detailed attention.

In modern day agriculture the provision of seed, fertilisers, plant protection measures, agricultural tools and implements, and credit facilities have achieved the status of necessary agricultural inputs.

**Land:** Pakistan is a land of great scenic contrasts. Geographically it is one great integrated region served by the mighty Indus. The total area of Pakistan is 198 million acres. Out of the total area, 132 million acres have been surveyed for which detailed statistics are available. Of the surveyed area, 50.30 million acres are not available for cultivation as this area is mountainous, river beds, etc. and another 6.43 million acres is under forests. The total area available for cultivation thus comes to about 75 million acres of which 48 million acres is cultivated, which is 36.3% of the surveyed area.

The rainfall in the country being low and scanty, agriculture is mainly dependent on artificial sources of irrigation. Pakistan has the world's largest network of canals which irrigates 23 million acres of the cultivated area. Another 9 million acres are irrigated by tube-wells and other conventional sources of irrigation. The total irrigated area comes to 32 million acres which is 67 per cent of the cultivated area. The rest is dependent on rain.

Efforts are being made to increase the supply of assured irrigation water. The Tarbela Dam, the biggest earth and rock-filled dam in the world, on the River Indus near Attock was expected to provide an additional 9.3 million acre feet of water, on its completion in 1975. Tube-wells are also being installed both in the private and public sector, and their number is increasing rapidly. Latest estimates indicate that more than 100,000 tube-wells are already operating throughout the country.

Cropping intensity remains low due to the scarcity of irrigation water and the need for leaving a sizeable part of the cultivated area as fallow to regain fertility. During 1971-72, 6.28 million acres were sown more than once and 11.76 million acres were left fallow. Table 21.19 indicates land utilization in Pakistan as a whole and in the four provinces.

TABLE 21.19

*Land Utilization*

1971-72

(In million acres)

Province	AREA REPORTED										
	CULTIVATED AREA										
	Total Area	Area not reported	Forest Area	Not available for cultivation	Other uncultivated land, excluding current fallows	Current fallows	Net area sown	Total area cultivated (columns 7 & 8)	Area shown more than once	Total crop area (columns 8 & 10)	Total area reported (columns 4, 5, 6 & 9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Baluchistan	85.79	38.74	2.65	27.59	13.89	1.94	0.98	2.92	0.04	1.02	47.05
N.W.F.P.	25.14	12.77	1.49	4.28	2.60	0.68	3.32	4.00	0.77	4.09	12.37
Punjab	50.95	9.07	1.05	7.00	6.56	2.76	24.51	27.27	3.99	18.50	41.88
Sind*	34.82	3.83	1.22	11.43	4.59	6.38	7.37	13.75	1.48	8.85	30.99
Pakistan	196.70	64.41	6.41	50.30	27.64	11.76	36.18	47.94	6.28	42.46	132.29

\*Previous year's figures repeated.

Source: Ministry of Food & Agriculture.

It is expected that by 1979-80, with the additional availability of around 18 million acre feet (MAF) of water, some 6 million acres of additional area should come under the plough and improved irrigation facilities provide for another 4 million acres.

The area under agriculture can be increased and/or improved through programmes of soil conservation and development of barani (rain-fed areas), although here the cost-benefit ratio should be carefully worked out. Actually several million acres of barani areas have soils and topography suitable for agricultural development. According to some estimates 40 MF of river water flows into the Arabian Sea, and the harnessing of a part of it could possibly change the economy of the barani areas. Some varieties of seed have been developed which do rather well in the barani areas and during 1975-80 government is considering establishing demonstration farms in these areas to show the correct mix of proper seed and fertiliser. Again, mechanisation will have to be introduced in these areas owing to the hard texture of the soil and this would necessarily displace human labour. The result may not be all that bad as these areas are largely favourite recruiting centres of the Pakistan Army.

Soil conservation measures were initiated in 1954 and suitable soil conservation measures and practices were developed and demonstrated to farmers. Some 115 acres of virgin land were reclaimed and about 180 acres of cultivated area improved in the Soan and Potwar upland areas between 1964 and 1973. During the Fifth Plan period 250,000 acres of gullied land are to be reclaimed and 750,000 acres of cultivated area improved in the Potwar and Soan valley areas and the Hazara district. Shortage of funds, small holdings and the poor economic condition of the farmers is largely responsible for the slow development of barani areas and soil conservation measures.

About 139 million acres, constituting some 70% of the total land area of the country, has been classified as range lands. These tracts receive so little rain that cultivation without irrigation facilities is an uneconomic proposition. Most of these lands are capable of supporting quite a large livestock industry. These lands have, however, been over-grazed and the grass and shrubs are not given a chance to get restored to their full potential and this reduces their grazing capacity. Most of these areas would respond well to scientific management. The improvement of about 15 million acres for grazing purposes would be an advance in range management and should not cost more about 150 to 200 million rupees.

**Water:** Water is the most scarce input for agriculture and no effort should be spared to optimise its use. Pakistan faces two critically serious problems in so far as water is concerned.

Firstly, there is an acute shortage of water for the existing irrigated areas. Existing water requirements are estimated at 165 MAF (Million acre feet). Rainfall contributes 6 MAF and the average annual river flow is 142 MAF (the lowest was 116 MAF in 1961-62). Thus without the remaining sources of sub-soil water recharge and ground storage, there would be a water shortage even if every single acre feet of river flows could possibly be utilised. According to a reliable estimate the full exploitation of ground and surface water resources could yield about 140 MAF in an average year.

Secondly, the tragedy of it is that fertile land is deteriorating on account of water-logging, salinity and floods. It is estimated that 17.41 million acres (52% of total culturable commanded area) lie in areas where the water table is within 10 feet of the ground surface. When large-scale irrigation was introduced the sub-soil water table was 80 to 100 feet below the ground surface but it has since been steadily rising. 7.8 million acres, that is 23% of the total culturable commanded area, is severely affected by salinity. The rate of deterioration is alarming as some 100,000 acres are being affected annually by water-logging and salinity.

Floods have become a more frequent occurrence in recent years but, by and large, their recurrence is spread over longer periods. With the completion of Tarbela and the Kalabagh Dams (expected to be completed in 1982) the intensity of future floods should decrease. Some protective measures should, however, be taken for floods of a reasonable magnitude.

This discussion points out the dire necessity of water management. Irrigation practices have not changed since the introduction of the irrigation system. The farmers need to be taught new skills in this direction. Outmoded and undesirable irrigation practices should be thoroughly reorganised. Field to field irrigation, zig-zag water course, using water courses when and where desired, and inequitable distribution of water are bad practices. But even more funda-

mental is to organise or recognise the system of irrigation so as to obviate the 30% or so waste between the availability of water at the canal head and that at the farm gates.

In 1970 the capacity of the canal system to withdraw water from the rivers was 70 MAF per annum at the farm gates and it is reported to have increased to 71.05 MAF in 1975. The fourth plan had provided for the completion of the Hub Dam and the Khanpur Dam but they could not be completed by 1975; the reason given was paucity of funds.

Ground water development added 6.6 MAF to water supply at farm gates between 1970—75. In five years the total water availability at farm gates increased by 7.65 MAF instead of the anticipated 15 MAF.

Thus in 1974-75 there was water availability at farm gates of 97 MAF (71.05 MAF surface water supply through the canal system and 18.95 MAF groundwater supply through public and private tube-wells) as against an optimum requirement of 165 MAF. It is reported that this water availability in terms of capacity is planned to be increased by 18.8 MAF by 1980. Tarbela would provide 9.3 MAF and SCARP tube-wells of WAPDA and other groundwater schemes in the public sector would provide the balance. Exploitation of water resources by 1980 would be 115.83 MAF out of a potential 143 MAF or 81% of the ultimate potential:

	Ultimate Potential (MAF)	End of 1975—80 (MAF)
(i) Surface water at farm gates which is 30% less than water at canal head	99.00	80.55
(ii) Ground Water	44.00	35.28
Total	143.00	115.83

Pakistan has three hydrological basins: the Indus Basin (138 million acres), Kharan Closed Basin (30 million acres) and the Mehran Coastal Basin (30 million acres). Pakistan is classified as an arid region because of low rainfall (mostly in high intensity rainstorms) and high evapo-transportation. Rainfall ranges from 4 inches per annum in parts of Sind and Baluchistan to 40 inches in the Himalayan foothills. There is some limited potential for storage irrigation in the Kharan Closed Basin and the Mehran Coastal Basin. The rivers in the Indus Basin receive their water from the melting snows in the Himalayas and Karakoram and from rainfall, and the pattern of their flow is such that more than 70% of the mean flow occurs in 4 months (June to September). Thus there is a shortage of water supply during the remainder of the year. This has necessitated the construction of some of the largest dams, storage reservoirs and link canals existing anywhere in the world. The Tarbela Dam on the Indus and the Mangla Dam on the Jhelum between them provide some 17 MAF per annum. Other major dams have been constructed at Warsak on the Kabul River and the Taunsa, Guddu and Ghulam Mohammed Barrages on the Indus. The Lloyd Barrage at Rohri was there long before Independence and Kalabagh should be completed by 1982. Besides there is a number of smaller dams under construction such as the ones at Khanpur and on the Hub River. A few small dams have been in operation for quite some time in the northern parts of the country. There is a network of canals in the Indus Basin running into thousands of miles.

The remedy in the light of the ultimate water potential would, therefore, lie in wise judicious and scientific water management. The suitability and availability of providing water as an agricultural input should also be determined by factors such as permeability of the soil, type of clay, minerals, the amount of gypsum in the soil, cropping pattern, climate, drainage conditions, adequacy of water supply, farm management, canal-type-well water mixing ratio, the quality of canal water and local conditions. Besides there should be a judicious allocation of water amongst various areas in accordance with the established rights of upper and lower riparians, and in the same area as between farmer and farmer without personal or political prejudice.

Inadequate natural and artificial drainage systems are causing water-logging and salinity. The surface drainage action programme is mostly based on the Liefstinck Report obtained in the

sixties. The only really constructive project put into operation for recovering land lost to salinity and water-logging is SCARP I and II of WAPDA and they have reclaimed just 1 to 2 million acres. The Fourth Plan (1970—75) initiated action on only a few areas recommended in this report which included drainage of some areas affected by newly constructed link-canals, provision of surface and sub-surface drainage facilities in the Mardan and Peshawar valley, implementation of Phase II of the Larkana-Shikarpur project, and surface drainage for the SCARP II area. As indicated earlier in 33.7 million acres of culturable commanded area the water table is within 10 feet of the ground surface and salinity has seriously affected 7.8 million acres. In addition 15 million acres are considered moderately affected by salinity. During 1970—75, 88,000 tube-wells were commissioned in the public sector alone. This led to some progress in reclaiming these areas.

The water-logging and salinity problem needs an accelerated programme. It is reported that such a programme is under active consideration and involves an expenditure of 19.6 billion rupees over 16 years which would reclaim 18 million acres. This would work out to about 1,100 rupees per acre. This programme will improve the drainage in the irrigated areas as also provide additional irrigation supplies. The programme is reported to include 36,000 tube-wells, 10,500 billion cubic feet of earthwork on surface drains and 75,000 miles of tile drain. The combating of salinity and water-logging is an expensive affair but it is by no means an expense which can be spared. Salinity and water-logging destroyed the fertile irrigated land of Mesopotamia thousands of years ago. Pray God a similar fate will not befall the Indus Valley.

Seed: "As you sow, so shall you reap", and "He who sows the wind reaps the whirlwind" are age-old sayings which, though they apply to the general conduct of life, are literally true as far as the application to land of quality and appropriate seed is concerned. Thanks to the application of science and technology to agriculture on a massive scale, new high yielding strains have been discovered for crops like wheat, oilseeds, rice, cotton, maize, vegetables and pulses, to name only a few, which increase yields by several times. Some varieties of seed can yield reasonably good results by using less than the average water requirements of other kinds of seed. The application of fertilisers in a scientific mix along with appropriate water supply can work miracles if the right seed is used. The introduction of the Mexipak wheat seed, accompanied by extended fertiliser application as well as a somewhat larger supply of water at the right time, brought about the "green revolution" in the sixties. The use of quality seeds on a large scale involves an adequate and effective organisation for securing and storing quality seed and then distributing it at the doorstep of the farmer. Seed multiplication farms have to be established and extended from time to time to cope with the increased demand. Approved seeds should be chosen with greater care after being tested under local conditions. Mixing of seeds should be regarded as a crime against society. Again, improved seeds when grown over a long period of time without being replaced at intervals deteriorate in quality, and this necessitates the replacement of old seed at regular intervals. This calls for a regular supply of breeder's seeds. The research organisations must, therefore, increase their capacity to produce this seed so that the pipeline never dries up. This would also call for the training of staff engaged in seed multiplication and its distribution. Organisations entrusted with the task of multiplication and distribution of seeds should also arrange for their testing and certification.

### QUALITY SEED PRODUCTION

The production and distribution of quality seed is being stressed in Pakistan. A FAO/IBRD Seed Mission has estimated Pakistan's requirements of certified seed of cotton, wheat, maize, rice (20% Basmati and 80% Irri), other small grams, potatoes and vegetable seeds at 1,909 million maunds (78,269 metric tons) in the fifth year of the establishment of a modern seed industry in the country. This would require about 68,000 acres; about 61% of the seed will be produced in Punjab, 28% in Sind and 11% in NWFP. Seed standards will be strictly controlled; production will be in the public sector at provincial level but distribution will probably be left to the private sector.

Fertilizer: Of all the changes needed to create modern agriculture in Pakistan—modern in the sense of intensive production on small holdings on the Japanese or Dutch models—the one single factor that will make a significant difference to the cultivator's income is the use of

chemical fertilizers. Indian agronomists have found that seven-ninths of increase in yields obtained with the "Japanese method" of rice cultivation in the sub-continent is attributable to the use of fertilizers and the rest of better cultural practices. Once the cultivator has adopted one improvement, he will be more ready to try out others. Even more important, once he has a margin above the bare minimum to keep his family alive, he can afford to be more enterprising.

Fertilizing is a simple thing to understand. It is not difficult for a comparatively less qualified extension staff to explain what to use, how much to use, when to use and how to use. It does not need special institutions for supervised credit—it is not difficult to tie in the credit required by cultivators who have no cash to spare before they have had more to sell with the sales of the fertilizers themselves. It can, therefore, act as the catalyst to spark off a whole series of changes that are needed in the methods of production, if the cultivator is to realise the productive potential at his disposal. One cannot wait for them all to happen on their own account nor is it practicable to get everything across to the cultivator all at once. But the experience of other countries has shown that the use of chemical fertilizers must, as nothing else can, be the spearhead of the entire agricultural development programme.

Cow-dung, crop residues, ash, bone-meal and oil-cakes have been used and are being used to restore soil fertility in Pakistan. But the quantities used, or those that could become available for use, are insignificant compared to the plant nutrients required for more intensive production. The 24 million head of cattle in Pakistan probably produce about 65 million tons of raw cow-dung a year. Most of this is burnt as fuel, because of the acute shortage of fire-wood. If as much as 30 per cent goes to the fields, this would make 100,000 tons of nitrogen a year, compared to the annual need of at least 700,000 tons of nitrogen for major crops alone. The compositing of organic manures has proved to be the most difficult improved agricultural practice to get across to the cultivators. The physical difficulties, the shortage of fuel, the need of oil-cakes as a protein feed for the animal population and the attitudes of the rural population make it unlikely that progress in the use of organic manures will be anything but slow. Even if the available supplies were used to the full, they would still fall far short of the requirements. Much more effective use will have to be made of the sources of organic manure in Pakistan, but organic manures cannot, in this country, replace the chemical fertilizers that are needed for intensive crop production.

The use of chemical fertilizers was introduced on a modest scale during the first plan period. It rose from 7,000 tons in 1955-56 to 20,000 tons in 1959-60 and then to 30,000 tons in 1960-61. Since then the consumption of fertilizers has gone up by leaps and bounds and hovered around 40,000 tons per annum in the first half of the mid seventies. Table 21.20 indicates the growth of fertilizer consumption since 1962-63. Figures for production and imports are given separately as are figures for nitrogenous, phosphatic and potassic fertilizers.

TABLE 21.20

*Production, Imports and Consumption of Fertilizer*

(000 nutrient tons)

Year	N.	P.	K.	Total	N.	P.	K.	Total	N.	P.	K.	Total
	Production				Imports				Consumption			
1962-63	40.42	1.67	---	41.49	31.14	---	---	31.14	40.80	1.00	---	41.80
1964-65	47.25	1.45	---	48.70	2.20	---	---	3.20	85.20	2.20	---	87.20
1969-70	129.29	4.18	---	133.47	293.13	6.40	---	299.53	272.81	33.81	1.34	307.71
1970-71	128.05	4.26	---	132.31	107.81	38.55	5.00	146.36	251.52	30.46	1.22	283.20
1971-72	215.07	4.88	---	219.95	70.42	---	---	70.42	343.97	37.23	0.74	381.94
1972-73	274.46	8.46	---	282.92	115.54	72.10	---	187.64	386.39	48.73	1.38	436.50
1973-74	299.86	4.01	---	303.87	224.54	103.90	6.31	334.75	342.66	58.11	2.67	403.44
1974-75	300.48	3.52	---	305	116.2	28.71	0.9	145	389	59	2	450

N Nitrogenous  
P Phosphatic  
K—Potassic

Source : Ministry of Food & Agriculture.

Chemical fertilisers when used in the right proportion are the single most effective input, contributing to increase in agricultural production. Estimates on fertiliser response ratios in experiments and on progressive farms are wheat (dwarf) 1:10; rice 1:10; maize 1:10; sugarcane 1:130; and cotton 1: 2. In view of the declining marginal productivity of fertilisers as their application increases and since actual responses under field conditions tend to be less, for purposes of planning the fertilizer response ratio should be reduced by about 30%.

One of the urgent problems which should be solved to increase wheat yields is to correct the phosphate fertilizer imbalance. Major emphasis has been given to the use of nitrogen fertilisers. The soil nitrogen level in Pakistan is, with only minor exceptions, extremely low. Nitrogen fertilizer application consequently produces impressive yield increases and make nitrogenous fertilisation extremely profitable. The soil scientists knew even then, as they do now, that the ratio of nitrogen to phosphorus application in Pakistan should be about two to one. However, records indicate that the nitrogen fertilizer sales are presently seven times that of the phosphate fertilizers. The native available phosphate levels of the soils have declined as increased yields are harvested. Consequently, farmers are currently getting less response to nitrogen fertilization than they did three years ago. Hence, the type of stories that circulated two years ago when some said that "Mexipak wheat has degenerated" or "The Mexican wheats have lost their yield potential", etc. are inaccurate descriptions of the real problem. The desirable ratio for the use of nitrogenous and phosphatic and potassic is 2:1 to 5:1 in 1975-76 and to reduce it further to 3:1 by 1979-80. The farmer should also be made to understand that phosphatic fertilisers must be applied before or at the time of planting in order to be effective.

Fertilizer consumption is expected to touch one million nutrient tons by 1979-80. Out of this, imports would only account for 71,000 nutrient tons or 7.1% of total consumption. The barriers to fertilizer consumption by way of non-availability of fertilizer at the right time and the right price, lack of adequate credit facilities, organisational changes in fertilizer distribution, and frequent upward changes in sale prices need to be reviewed more thoroughly. Besides the price relationship between fertilizer and commodity prices should be maintained at an optimal level.

**Plant Protection:** Insect pests and diseases have been a constant threat to man, his agriculture and his civilization. They have caused famines and the emigration of large populations. The potato famine changed the course of Irish history. Coffee cultivation in Ceylon had to be abandoned and substituted by tea because no satisfactory methods of control were then known for the rust disease which wiped out the entire coffee plantation. From ancient times swarms of locusts in many Asian and African countries have brought misery to millions of people.

The Indo-Pakistan subcontinent has had its own recent history of devastation from pests and diseases. The great Bengal famine of 1942-43 was in large part caused by an attack of paddy blight and was a source of tremendous suffering and death. Another serious problem arose after the opening of the Lloyd Barrage at Sukkur in the Province of Sind. Part of the newly irrigated areas were planted to cotton, but cotton as a crop had to be abandoned for many years because of an insect, the black-headed cricket. The attacks of the cotton leaf roller in Sargodha and Gujrat districts have been so intense that the yields in some years have been reduced to 80 pounds per acre. Fruit orchards in the Quetta and Peshawar Divisions suffered from an attack of the codling moth in the late forties to such an extent that the owners started cutting down their plantations. Sugar-cane has been attacked by pyrilla, particularly in the Peshawar Division, seriously affecting the yield of cane and the sugar content of the cane. The sugar-cane borer is a menace and has reduced cane yields by as much as 40%. Pakistan has also inherited 115,000 square miles of desert areas which are considered to be potential locust breeding grounds. This constitutes more than 70 per cent of the total locust breeding area in the Indo-Pakistan subcontinent.

Pakistan, because of its geography, has some disadvantages in relation to the control of insect pests. The majority of the cropping area lies in one large basin which allows free dis-

person of insect pests and their wild host plants. There are no natural barriers to this movement. Since the climatic condition is predominantly subtropical and the winter season is both short in duration and mild, freezing temperatures do not significantly reduce insect populations. Large numbers of broods are hatched per year and breeding populations remain active throughout the year. Measures to control pests under these two conditions tend to be more complex and more demanding than the ones in areas where geographical isolation and cold winters tend to confine and limit the problem. Thus research directed towards solving particular pest problems must be more specific, more thorough, and more detailed than may be necessary elsewhere. If modern technical agriculture is to significantly increase yields, careful research in entomology must be undertaken, and proper pest control programmes must be carried out over large areas of the country.

Certain cultural practices have proved to be very effective in partially controlling or minimizing the incidence of pest damage to crops. In Pakistan this field has been largely neglected. Farmers pay little or no attention to eliminating weeds which serve as host plants for pests, preserving the species from one season to the next. These plants should be identified and the farmers informed of the need for their destruction. Residues of crops, particularly cotton, are hospitable places for overwintering of insects, such as the bollworms, jassids, white flies and plant bugs. They usually subsist over winter only if their specific food is available. Farmers should destroy the stalks of crops as soon as the crop is harvested or certainly some months before the next planting season.

In Pakistan losses caused by insect pests and diseases cause a loss of 20 to 30% of the agricultural produce in normal years. The importance of plant protection measures cannot be exaggerated. The estimated increases in yields per acre through plant protection measures are estimated at 0.2 tons for rice, 0.1 tons for maize, 1.5 tons for sugar and 0.03 tons for cotton. For purposes of measuring the plant protection response to actual field conditions these figures should be reduced by 25%. At mid-1975 prices the gain per acre in money terms would be about Rs. 229 to Rs. 261 for rice, Rs. 98 to Rs. 109 for maize, Rs. 204 to Rs. 272 for sugar-cane and Rs. 54 to Rs. 81 for cotton. The estimated coverage during 1974-75 is indicated in Table 21.21.

TABLE 21.21  
*Plant Protection Coverage in 1974-75*

Crop	(000 acres)		
	Ground Operations	Aerial Operations	Total
Wheat	83	—	83
Rice	875	800	1,675
Maize	305	—	305
Cotton	1,123	325	1,448
Sugar-cane	356	370	726
Others	1,500	200	1,700
Total :	4,242	1,695	5,937

By 1979-80 plant protection coverage will be increased by 56%. In order to protect the wheat crop from seed and soil borne diseases, wheat seed will be treated chemically before supply to growers. The number of pesticides in fashion in Pakistan needs to be reduced. The availability to farmers of pesticides in small packages along with the spray equipment would reduce the cost of ground operations which are rather expensive when handled by a public agency. An effective system for distribution of pesticides and plant protection equipment at village level would have to be arranged. Import of concentrated raw material in bulk for formulation within the country could save a lot of valuable foreign exchange.



**Agricultural Tools and Implements:** The popular concept of farm mechanisation is that of levelling and developing huge tracts of land by bulldozers, using tractors, for ploughing land, and putting harvesters and threshers to work in harvesting crops. It is, in fact, much more than that and covers the use of efficient ploughs, shears, tillers, pumps, seed drills, driers and a whole lot of other agricultural tools and implements. While there may be some controversy on the use of heavy equipment like bulldozers, tractors and harvesters and threshers, there can be no two opinions on the desirability of replacing outmoded agricultural implements by efficient agricultural tools.

In Pakistan there has been a surge in recent years towards farm mechanisation both in the public and private sectors. Farm mechanisation certainly improves efficiency and reduces the drudgery of farm operations, and it should, therefore, help to improve productivity. There is also the problem of shortage of farm labour during the harvesting and sowing seasons. According to the Farm Mechanisation Committee Report of 1970 the cost of cultivation with bullocks is twice as high as with tractors. Besides bullocks make for a huge demand for fodder and this increases the pressure on agriculture which is required to cater to the requirements of man and animals on an ever-increasing scale. The problem of efficiently handling and maintaining agricultural equipment has not received the attention it deserves. The training of operators and mechanics, as also the availability of maintenance units, is very important.

### MAN VERSUS MACHINE

Some writers have forcefully argued that farm mechanisation leads to the displacement of labour. The urgency of providing gainful employment to rural labour has been discussed in an earlier part of this chapter. Some experts advance the view that farm labour displaced by mechanisation can be absorbed by the increased farm production.

The late Pandit Jawaharlal Nehru stated the case against farm mechanisation in typical Gandhian terms:

"A hundred Suratgarhs (big mechanized state farms) would naturally multiply the production of one Suratgarh a hundred times, but what you forget is the vast human element involved in any consideration of rural India. We don't lack people. They constitute our biggest machine or lever or whatever you like to call it. As Gandhiji used to stress to us all the time; 'You talk about the machine, well I am not against the machine, he would say, but we happen to have thirty crores of machines in India. Why should we not use them? They are the human beings who work. Peasants with tremendous capacity for work. Now you may get a better machine per man or a hundred men or over a thousand men, but you are wasting thirty crores, or twenty crores or ten crores of machines and they are not merely machines, they are human beings who have to be fed and looked after. So there is no device to solve the main problem of human beings happening to be creative and productive. So coming to the point, if we put Suratgarhs all over the place, what is one to do with our labour potential?"

Gunnar Myrdal in "Asian Drama" has stated the case for mechanisation on the basis of a valid economic thesis:

"The discussion of the effects of technological reforms on labour utilization in agriculture has been distorted by the assumption of most economists of the modern school that the marginal productivity of labour in under-developed countries is zero (or even negative). Associated with this fallacious notion is the uncritical inference from a high man/land ratio that the traditional agricultural practices in South Asia are highly labour-intensive. This approach creates the suspicion that the application of a more advanced technology will have an adverse effect on the demand for labour. Another unfounded, though different, common inference is that students of technological reforms need only concern themselves with the productivity of land—the output per hectare—as labour is abundant and will continue to have a zero marginal productivity. This whole way of thinking is not only built on invalid assumptions about reality but is theoretically confused in several respects. In reality, South Asian agriculture is for the most part 'extensive' inspite of the very large and

rapidly growing labour force squeezing a living from the land. This is an inference drawn from the extraordinary low yields prevailing, which everywhere could be raised substantially even with the use of no other techniques than those traditionally available. An increase in labour input and a rise in labour intensity would raise production. If by a miracle the cultivators in South Asia could be induced to work more diligently, production would rise dramatically. Health deficiencies, largely caused by under-nutrition, would set a limit on the increase. But as production began to reflect the initial improvement in the quality and quantity of labour input, this limit would gradually move upward in a process of circular causation. It is expected that educational reform and exhortative elements in government-sponsored propaganda and agricultural extension work will have the effect of making people work longer and harder; it is also hoped that through these agencies labour effort can be channelled in more rational directions."

Another difficulty relating to the practical extension of agricultural technological improvements is the reluctance of the cultivator to assimilate changes that would affect the traditional pattern of his life.

Morris Opler in an article in "Economic Development and Cultural Changes" has this to say: "The appearance of the iron plough raised other problems for the agriculturist too. He had a long-standing arrangement with the carpenter whereby the carpenter made and repaired his wooden plough. By the acceptance of the iron plough he risked the displeasure of his carpenter and reduced the work opportunities of another group. Moreover, who sold the iron plough could guarantee no ready supply of parts and services. The carpenter stood ready to come into the fields and repair a broken instrument at short notice. The iron plough though reasonably light, was still a heavy implement for a man to carry to his scattered fields. He feared the effects of the use of the iron plough on his own health as well as on that of the bullock. Without going any further I think it will be admitted that the caution in welcoming the iron plough was not entirely a matter of unthinking, ingrained conservatism. It is sometimes the person at the receiving end of development projects who senses the implications of action most completely and who foresees the adjustments he will be called upon to make."

And so the argument for and against farm mechanisation go on *ad nauseam*. There is, however, no gainsaying the fact that a selective utilisation of farm equipment is necessary in Pakistani conditions and that, if wisely planned and implemented, it would increase efficiency and productivity, as also absorb additional labour. For instance in 1974-75, 1,200 bulldozers successfully developed 217,000 acres and also improved an equal area; for 1975-76, the comparable figures are expected to be 300,000 acres and 150,000 acres respectively. Mechanisation is not only necessary for precision, land levelling and improved water management, but it also serves a useful role in its partial use for land development, ploughing, land marking, harvesting and threshing. It is highly desirable to undertake a survey of the socio-economic effects of farm mechanization with a view to selecting the most appropriate farm equipment suited to local conditions, including the gainful employment of rural labour. It is rather surprising that this exercise has not yet been undertaken.

**Credit:** Credit needs of the cultivator may be divided into the following three categories:

- (i) Short-term loans (up to 18 months) for seasonal requirements, including family expenses, preparation of land, purchase of seed, pesticides and fertilizer;
- (ii) Medium-term loans (upto about five years) for expenditures for plough cattle, equipment and certain types of land improvement, such as small irrigation schemes;
- (iii) Long-term loans for the purchase of land, or expenditures for certain types of land improvement, or purchase of heavier farm equipment like tractors and threshers.

The major part of the amount borrowed by small cultivators is for meeting family expenditures or the expenses of cultivation. In other words, the basic need of the small cultivator is probably for short-term credit, though occasionally he may need medium-term credit for buying plough cattle or implements. The demand for heavier farm equipment like tractors and for pumps and tube-wells is also increasing. Usually, he does not have any security of tenure and has, therefore, neither any interest in contracting long-term loans

for land improvement nor, in the absence of any tangible security to offer, is he in a position to contract long-term loans. This condition has been remedied by banks accepting the mortgage of land for loans. Although the basic need of the small cultivator in present circumstances may be for short-term and medium-term credit, he is often unable to clear his debt after having contracted it, and consequently he becomes perpetually indebted. For purposes of purchasing, expensive items like tractors and pumps, or installation of tube-wells, small farms could form cooperative which would give them a better credit rating.

In order to meet various types of credit requirements, the Agricultural Development Bank of Pakistan advances short, medium and long-term loans. Short-term loans are given to finance the cost of production and marketing of agricultural products. Medium-term loans are given for a period exceeding 18 months and upto five years. These are usually granted for purchase of agricultural implements, means of transport and light machinery, cattle and sheep breeding, dairy farming, poultry farming and reclamation of land. Long-term loans are advanced for a period exceeding five years for development purposes, like construction of warehouses and cold storages, purchase of tractors and other heavy machinery, establishment or development of agro-industries, installation of tube-wells and plantation of orchards. The Bank has revised the rate of interest from 7 per cent on short-term loans to 9 per cent on loans upto Rs. 5,000 from 8 per cent on medium and long-term to 10 per cent from January 1974. The increase of 2 per cent is due to an increase in the lending rate by the State Bank of Pakistan. The Banking Reforms Act of 1971 also makes it obligatory on commercial banks to advance loans to cultivators; their loaning procedure has been simplified by introducing the "Pass Book System". During 1974-75, the total availability of agricultural credit for investment and seasonal finance is estimated at Rs. 6,700 million as follows:

Commercial Banks	2,050	million	rupees
A.D.B.P.	3,600	"	"
State Bank (through agriculture Credit Societies)	1,000	"	"
Loans from Provincial Government	50	"	"
	<hr/>		
Total	6,700		

During the next five years these credit facilities will be substantially enlarged. The danger of their being frittered away on luxury consumption and/or utilised for promoting political vested interests should be avoided at all cost. All this agricultural credit is public money and those responsible for administering it should be held fully accountable.

## Other Facilities for Agriculture

**Marketing:** The increasing output of agriculture must find a market at a price which at least repays the farmer his cash costs and for his effort in the production process, and also ensure a reasonable profit. This implies that there must be a demand for agricultural products, a marketing system through which to sell agricultural products and, last but not least, a measure of confidence in the farmer in the working of the marketing system based on past experience and future expectations. Transportation, storage and processing facilities improve the market. Processing takes on an added importance in the case of perishable products which cannot be stored. Financing and managing the entire marketing operation are also essential functions of marketing. Again the cost of marketing should be kept within reasonable limits and should not exceed a certain percentage of the selling price—a 10 to 20% margin would be considered reasonable. Some form of monopoly in marketing arrangements is sometimes unavoidable; the working of such monopolies should be subject to close scrutiny. It also happens, sometimes, that there are too many middlemen; this is also not a happy situation.

The confidence of the farmer in the marketing system would require that he comprehend the services of merchants (private, cooperative or government) and that each of these services is provided at a legitimate cost. The record of past performance of the marketing system is also an important factor. The importance of marketing needs to be recognised on a pragmatic basis;

it involves knowledge, skill and willingness to take risks that are necessarily involved in the marketing process.

In Pakistan the problems and difficulties faced by farmers in marketing their produce are inadequate and bad roads; lack of proper grading and cold storage facilities for perishable products; long distances from markets; and shortage of warehousing facilities. Construction and improvement of farm to market link roads needs to be expedited. It has been proposed to utilise the facilities at the markazes under the Integrated Rural Development Programme (IRDP) for marketing arrangements; the arrangements have still to be made and their efficiency yet to be judged. The Cotton Export Corporation is actively engaged in the marketing arrangements for cotton. The thinking appears moving towards a greater use of the private sector in the field of agricultural marketing. The private sector, if competition is even reasonable, can arrange marketing much more efficiently and at much less cost as compared to a public agency.

**Storage:** In June 1975 the storage capacity of the Federal and Provincial Governments was estimated at 1.89 million tons. This capacity is used for storing wheat, rice, sugar, etc. for operating the price support policy programme, for exports, and for providing an adequate level of reserves for use to meet an emergency. A Canadian team estimated that the total storage requirements of the country in 1979-80 would be 2.28 million tons. This figure has not been accepted but, in view of the increased requirements for storage capacity, a crash programme of constructing 620,000 tons of storage capacity in Punjab and Sind has been initiated. Additional capacity would also be required in Baluchistan and NWFP for maintaining reserve stocks for release when needed.

**Education, Extension and Research:** Increased emphasis on agricultural development has rapidly raised the demand for graduates in agriculture and other fields. With the acceleration in the tempo of development in agriculture, the requirements of various categories of technicians has been rapidly increasing. During 1970—75, steps were taken to expand the University of Agriculture, Lyallpur, and to improve facilities at the existing Agricultural Colleges at Tandojam and Peshawar. The Agricultural Training Institute, Sakrand (Sind), the In-service Training Institute, Sargodha (Punjab) and the Field Assistant Training Institute at Peshawar were strengthened during the 1970—75 period. Consequently, the output of agricultural graduates and post-graduates during 1973-74 went upto 1,430 compared to 580 in 1969-70. The usefulness and effectiveness of the field assistants has been enhanced by extending their diploma course to three years, which includes one full year of practical training. In addition, in-service training courses and refresher courses are more frequently organized to keep the field staff abreast of the latest technology.

Agricultural extension services play an important role in educating farmers in adopting new technology. Under the existing set-up of the agricultural extension service in the country, one field assistant looks after about 5,000 cultivated acres. The service now employs about 4,220 extension workers, of which 710 are agriculture graduates and 3,510 are diploma-holders. The provincial agricultural extension services, organized on traditional and hierarchical lines, are of little utility to the farmers. Several surveys have shown that there was an extremely low level of contact between the farmers and extension personnel and that such contacts are infrequent. The efficiency of the extension services was severely affected by poor service conditions and inadequate provision of extension aids and other equipment. By and large, the extension worker spends most of his time on tasks which have little bearing on farm productivity.

Some of the results of agricultural research introduced in the field during 1965—70 are a landmark in agricultural research in Pakistan. The break-through in agriculture witnessed in the sixties was substantially due to the new wheat, rice and maize varieties evolved during the past few years. Similarly new varieties of other important crops (like sugar-cane) endowed with characteristics of early maturity, high yields and resistance to pests and diseases have been evolved and released. However, inadequate financial support and lack of co-ordination in research activities have hampered further progress. It is, therefore, necessary to prepare and implement a problem-oriented research programme on various important crops in coordination with the

existing research institutes. The research work conducted by the universities has hardly been made use of or coordinated with programmes implemented by the provincial research organisations. Therefore, some very valuable findings by the universities have remained only of academic interest and have hardly guided the research staff engaged in crop improvement at the research institutes. Secondly, no clear-cut priorities have been fixed in the research programmes particularly in the case of minor crops. As a result, important crops like pulses and oilseeds have almost remained neglected and their yields have remained very low resulting in short supplies. Cultivation of suitable varieties of castor should be encouraged.

## IRDP AND PWP

The Integrated Rural Development Programme (IRDP) and the People's Works Programme (PWP) have inherited the mantle of the Basic Democracies, Community Development Programme, Rural Works Programme and the Village AID Programme initiated with partial success in the early fifties when popular figures like Hafeez Jullundari were employed to popularise them. The Rural Works Programme was initiated during 1962-63 and it brought about a change in the rural economy by building up the rural infrastructure. A large network of roads was constructed and/or improved, and construction of drainage, embankment and irrigation canals taken in hand. The Programme also employed vast members of rural labour during the slack season. Community development programmes represent quite an ambitious effort to spark a cumulative process of village uplift in societies suffering from centuries of stagnation.

The concept of the People's Works Programme lies in involving the people at the grass-roots level in the planning and execution of development projects. It has been conceived as a joint enterprise of the Government and the people. As such its success will depend upon motivation of the masses on a national scale. The crux of the programme is the creation of a desire among the people to improve their living conditions by generating self-awareness and confidence in their own capabilities.

The People's Works Programme (PWP) has not been planned as a purely economic or commercial venture. It aims at giving people a sense of participation as equal partners in fashioning their own destiny. Its object is to make all members of the society aware of their potentialities as men and women.

Capital deficiency is rectified through sizeable financial allocations and the technical and administrative resources are utilized for implementation of the programme. The mobilisation of the unemployed and underemployed manpower in different sectors of the economy will also help overcome the shortage of capital. Besides, the programme itself will generate the bulk of the required resources for payment in kind. This will minimise inflationary implications of large scale investment.

Under the PWP, priority is given to such productive projects of short duration as would build up the economy through the provision of basic capacities and amenities in as many sectors as possible. The main field in which schemes are being implemented under this programme are housing, roads, playgrounds, adult education, tree plantation, drinking water and industrial homes for women.

On its part, the Government will provide administrative, technical, legislative and some financial supports.

## IRDP

The concept of the Integrated Rural Development Programme developed out of indigenous experience obtained at the Shadab Pilot Project (near Lahore). It is "to select a production area comprising 50 to 60 villages mostly with small and medium-size farmers with a view to improving their socio-economic status by intensive rural development programmes with an initial thrust to increase productivity by providing technical guidance, supervised credit, supply of inputs, machinery on hire, storage and marketing facilities etc., based on sound physical, organizational and institutional infrastructure, by intensification and commercialization of agriculture through a social cooperative system under a total approach."

The Integrated Rural Development Programme, started in July, 1972, is based on the Philosophy that all aspects of rural life are inter-related and that no lasting progress can be made if the various problems are not attacked simultaneously. With this objective in view, an institutional framework is being developed which, on the one hand, will mobilize rural capital for agricultural developments and, on the other, will provide a package of technology, input and services to the farmer right at his doorstep. The programme, being implemented through various project areas, also aims at improving the physical infrastructure in the rural areas.

### ON THE SPOT GUIDANCE

At the centre of activities called the 'markaz', all the nation-building departments, such as agriculture, animal husbandry, fisheries, cooperatives and A.D.B.P. etc., are to work in a co-ordinated manner. Housing facilities will be provided at agricultural centres for agricultural staff etc., so that the technical guidance to the farmers could be made available on the spot. The activities of the markaz mainly depend on its ecological and geographical factors, i.e., availability of irrigation water, soil, sub-soil water, rainfall etc. Based on these physical characteristics, the activities of markaz vary. Priority will be given to land, water and agricultural development in the fertile and productive tracts of Punjab, Sind and NWFP. In the poorly irrigated areas, the emphasis may be laid on non-farm employment promotion by developing small industries and by developing agrovilles etc. Similarly, in the arid zones, the markaz will help improve agriculture through improved agronomic techniques. Thus, within the overall framework or philosophy of the IRDP, each province will have its own approach suited to it.

The markaz will be provided with regulated markets to solve marketing difficulties of farmers. Various agro-based industries will be developed at markaz level to provide off-farm employment for rural population. For successful implementation of any development programme, the people's participation is necessary which IRDP will ensure. To improve living conditions of the farmers, villagers will be provided such facilities as low cost housing, electricity, approach roads, drinking water, dispensaries, education etc. as far as possible. Efforts will be made to meet sugar, ghee and other basic needs of the villagers. A sum of Rs. 250 million with a foreign exchange component of Rs. 5 million is being provided in the Development Perspective (1975—80) for this programme.

### AGROVILLES

Broadly defined, agrovilles refer to small towns located in rural areas, conceived to be self-contained urban settlements planned to offer its inhabitants a balanced range of essential public services and social and cultural facilities. The programme has been necessitated to arrest the rapid migration of population from villages to the large cities through the provision of education, health, water supply, waste disposal, energy, transport and other facilities.

Due to the huge migration of rural population to urban areas, the major cities have now become the refuge of growing masses of poor people resulting in haphazard growth, slums, overcrowding, inadequate municipal financing, crime and other social problems. It has, therefore, been considered important at this stage that plans are prepared for channelling the migratory flow towards newly developed towns, and for protecting the existing larger cities from overgrowth.

Agrovilles will be properly planned in accordance with the town planning standards. Each agrovillage will be provided with a physical infrastructure such as water supply, sewerage, drainage and roads. In addition, all the urban amenities such as a market place, health and educational facilities, banks, town halls, agro-based industries, cottage industries, housing and storage facilities will be provided.

The practical implementation of the concept of agrovilles is a little ahead of our present stage of development. Anyway, good luck to would be agrovillage planners!

## AGRICULTURAL PRICES

Agricultural pricing policies in developed and developing countries are generally characterised by two inherently conflicting motives. One is to provide incentives for farm production and to ensure that the availability of food items and cash crops is sufficient to meet domestic requirements and provide an export surplus, both in adequate quantity. The other is to ensure that consumer prices are kept down so as to avoid inflation. Surprisingly enough, despite the enormity in income differentials, the psychological impact of increase in food prices is almost identical in the USA and Pakistan, although here food is the dominant consumption expenditure while in the United States it is relatively small as compared to total expenditure. The rationalisation of agricultural pricing policies would be difficult enough even employing objective analytical techniques. The attempt to coordinate, or more likely "staple together," a price structure which provides production incentives through attractive higher prices and at the same time attempts to ensure availability of food items at "prices within the reach of the common man" will run into serious difficulties in the under-developed countries and will probably end up by failing to achieve either objective. It will be long before these economies can bear the burden carried by the economies of Japan, Western Europe and North America where farmers are pampered with subsidies on farm products paid out of public revenues. The LDCs are much too poor to be able to afford a massive transfer of funds from the urban to the rural sector which would be required to implement an agricultural pricing policy whose dual purpose is higher prices for farm incentives and lower prices to contain inflation. Agricultural expansion is basically a problem of making additional efforts and adopting new techniques, and farmers would not undertake this exercise unless they foresee a reasonable return at reasonably stable prices. The critical question is whether policies of safeguarding the consumer in Asian and African countries hamper agricultural production, and thereby perpetuate the very inflationary pressures they were designed to control.

### MAIN OBJECTIVES

Increase in agricultural production with emphasis on foodgrains (self-sufficiency in food is the primary objective), stabilization of consumer prices to keep down the cost of living, provision of a stable income and fair return to the cultivator, the supply of adequate agricultural surpluses for meeting the growing requirements of agro-based industry, and contributing sufficiently to export earnings are in practice the main objectives of agricultural price policies.

All these countries give priority to agriculture in the development plans, but the farmer's capacity to make full use of the development facilities available would largely depend on the prices received in relation to the costs involved. The relative prices of competing crops have also to be kept in view if the various production targets are to be met; the choice of the cultivator among competing crops would naturally be decided by their relative profitability. An effective price policy should shelter both producers and consumers from the consequences of abnormal fluctuations which afflict agricultural prices.

In countries such as Pakistan the peculiar features influencing the methods of price and income support are the predominance of agriculture in the economy; undulating character of agricultural production and agricultural prices if left free to be determined by the forces of demand and supply (occasioned by the seasonal character of agricultural production, changes in level of production from year to year, and difficulties in marketing accentuated by speculation); subsistence character of agricultural production; the limited extent of marketed surplus (high income elasticity of demand for food items in rural areas does not permit the increase in production to be fully reflected in increase in market availability as most of the extra production is consumed at the farm); the production response of the farmer (experience in recent years suggests that farmers do respond positively to higher prices particularly when competing crops are involved); and, finally, the possibility of transfer payments to or from agriculture. In view of the large size of the agricultural sector large and sustained transfers between agriculture and the other sectors would either be inflationary

(in the case of transfers to the agricultural sector) or inequitable (in the case of transfers from agriculture).

When agricultural prices are regulated at the producer level, regulation is generally with regard to one of the following: a minimum price; a defined price range; a fixed price, and a maximum price. Differentials are usually permitted for differences in grades and sometimes even for delivery dates. The differences in these forms are much less than what appear at first sight. When supplies are limited in relation to demand, the maximum price will approximate a fixed price since the pressure of demand will permit all sales to be made at the maximum price. Again, although a minimum price guarantees a certain floor price to the cultivator, leaving him free to benefit when markets favour him, yet this freedom is more theoretical than real. At the time of harvesting, when farm sales are usually made, market prices are, if anything, depressed in relation to minimum prices for the administration of the latter can be extortive and, other things remaining the same, farmers prefer to deal with the private sector which is unencumbered by red tape and possibly malpractices. This attitude, though, is now changing. In any case, if market conditions do loop up after the harvest has been disposed off, the gain goes to the trader and not to the cultivators.

The implementation of producer price policies in the LDCs is made difficult by the small scale of production and even smaller marketed surpluses, the lack of monetary resources, and the nature and complexity, administrative and physical measures involved (including collection, weighing, grading, disbursement, transport, storage and sale). There are risks as well if large stocks of a particular commodity are accumulated and domestic and export prices decline. In fact all the problems and risks inherent in the marketing of agricultural produce are borne by the public agency entrusted with responsibility of administering the agricultural pricing policy. The financial risk is magnified if the product affected by the pricing policy is exported on a large scale or if it is processed by domestic industry and then exported. Most LDCs whose export product cannot influence world prices adopt national measures for stabilising prices through variable export duties, multiple exchange rates, state control of exports, and price stabilisation funds (most LDCs can seldom afford this).

The level at which agricultural prices should be regulated or supported and their relationship to each other has to be determined with great care. The inherent conflict between the various ends of agricultural pricing policies can never be resolved but the promulgation of a judicious mix minimising the adverse side-effects would of necessity have to be adopted if economic, social and political conditions so warrant.

Prices are regulated according to certain generally accepted formulae, such as Cost of Production, Purchasing Power Parity, and Moving Average of Past Prices. It is also usual to adopt a combination of these formulae as also other factors to determine the regulated price. The Parity formulae are used to maintaining the purchasing power parity of agricultural incomes. The Moving Average formulae are related to supporting prices at a certain level (generally 80% or so) of the average price in past years (generally 5 to 10 years).

Estimates of the *Cost of Production* of output (unit cost of production) is the major factor in determining the regulated price level. This factor should be considered along with other relevant factors (prices of competing products, relative levels of farm and non-farm incomes, world market prices, demand and supply relationships, and price levels in general) in determining the level at which agricultural prices are to be regulated.

The author had arranged a Travelling Seminar of Iranian, Pakistani and Turkish agricultural experts in 1963 through the courtesy of Berger Indseth, U.S. Deputy Coordinator for CENTO projects, with the object of analysing and reporting on the cost of production of certain agricultural products. They adopted a method for calculating the cost of production and return on investment. On account of the pragmatic nature of their technique, the method employed by them is detailed as follows:



Gross value per acre of the crop was computed by simply multiplying the average yield per acre by the price received for the crop at the farm gate. Most farmers in the CENTO countries sell their crops at harvest. Therefore, this data represents the value of the crops at harvest time.

Computing costs of production was a more complicated procedure. Items of costs were found by the following method:

**Seed**—Quantity used by the farmer per acre multiplied by the price paid per unit of seed in the local area.

**Fertilizer and Manure.**—Total value of animal manure and chemical fertilizer used per acre was determined. For each of these items, the quantity used by the farmer was multiplied by the value per unit in the local area. From the standpoint of producing a crop, the value of animal manure used is a cost to that crop even though it is produced on the farm. Actually, it could be used on some other crop or sold to some other farmer, or in some areas, used as fuel. Hence its value is what is called an "opportunity cost."

**Spray.**—Cost of spray materials plus the cost of operation of the sprayer to apply them was determined. Most farmers could give accurate figures on the gross amount spent for this purpose.

**Water.**—The average per acre cost of purchased water was charged to irrigated crops only. Where no water was purchased, none was charged.

**Land tax.**—Land tax charged per acre was that given by the farmers.

**Power costs (bullocks, horses and tractors)**—(a) Total days of each kind of power was determined for each operation on all the crop. This step was done by (i) asking the farmer the number of times he performed each operation on all the crop; (ii) asking him how long it took to do the operation one time; (iii) multiplying the time required to do the operation once by the number of times performed; and (iv) adding together the bullock, horse or tractor hours required to do all the operations. Finally, total days required for all the crop was divided by acres of the crop.

(b) The days required were multiplied by the cost per day of operating a bullock, horse or tractor, whichever was used.

It should be remembered that power is one of the biggest costs of producing a crop.

**Equipment costs.**—Costs per acre of operating such items as ploughs, drags, ladders, harrows, discs, threshers, etc. were determined by the same procedure as that used for determining power costs.

At this point the cost per acre of all items other than land and labour were added together. This value was subtracted from the total value per acre of the crop in order to get net returns per acre to land and labour.

**Labour Requirements.** Labour requirements for producing an acre of each crop were determined in detail for each operation performed. Then, labour for each operation was added together to get total labour requirements for all operations. For example, to find out how much labour was required for weeding an acre of crop by hand, we started by asking the farmer how many times he weeded his crop last year. Then he was asked how many men it would take to weed his total crop, say 10 acres, in one day. The third step was to

multiply the number of times weeded by the number of men required to weed the whole crop one time in one day. This gave the man-days required for the entire weeding operation. Finally, the total man-days required were divided by the acres in order to get man-days per acre.

The above procedure was repeated for each operation performed in raising the crop. This was a very important step in completing the study and the farmers had no difficulty in giving exact answers. Success in getting this kind of information is largely determined by the ability of the interviewers to use the farmers' terms.

The costs and returns per acre of wheat and sugar-cane worked out by the CENTO experts 12 years ago may not be valid in actual money terms, but they do demonstrate a practical and simple, yet effective, methodology for determining cost of production-

### *Costs and Returns per Acre of Wheat*

#### **Area 2—1962**

##### *Value of Production*

Production, lbs per acre	1,077
Price per lb	\$ .036
Value per acre	\$ 38.52

##### *Costs other than Land and Labour*

Seed	\$ 2.89
Manure and Chemical Fertilizer	5.46
Water	3.67
Land Taxes	.98
Bullocks (23.9 days at \$ .54)	13.04
Drag (1.8 days at \$ .09)	.02
Plough (6.5 days at \$ .01)	\$ .65

Total	\$ 26.71
-------	----------

##### *Return to Land and Labour, per acre*

Less total labour cost (23 days at \$ .44)	\$ 10.12
--	----------

Equals return to land (total)	\$ 2.06
-------------------------------	---------

Rate earned on land, percent	.2%
------------------------------	-----

<i>Return to Land and Labour</i>	\$ 10.12
Less cost of land (\$ 1,028 per acre at 2% interest)	20.56

Equals return to labour (total per acre)	\$ 10.04
--	----------

Return to Labour per day	\$ .43
--------------------------	--------

## *Costs and Returns per Acre of Sugar-cane*

### Area 1—1963

#### *Value of Production*

Production, lbs per acre	49,000
Price per lb	\$ .0035
Value per acre	\$ 171.50

#### *Costs other than Land and Labour*

Seed	\$ 8.98
Manure and Chemical Fertilizer	9.12
Water	2.60
Land Taxes	1.70
Bullocks (20.4 days at \$ .42)	8.36
Plough (16 days at \$ .02)	.32
Drag (4.3 days at \$ .09)	.39

Total	\$ 31.67
-------	----------

<i>Return to Land and Labour, per acre</i>	\$ 139.83
Less total labour cost (82 days at \$ .44)	36.08

Equals return to land (total)	\$ 103.75
-------------------------------	-----------

Rate earned on land, percent	7.3%
Return to Land and Labour	\$ 139.83
Less cost of Land (\$ 1,417 per acre at 2% interest)	28.34

Equals return to labour (total per acre)	\$ 111.49
--	-----------

Return to labour per day	\$ 1.37
--------------------------	---------

The effects of price policy on the production of foodgrains are not as much or as intense as those on the production of cash crops since a large proportion of the former is consumed by the producer himself. In Pakistan the prices of wheat, rice, sugar-cane, vegetable ghee (a processed product of oil-seeds), and cotton are regulated and all for varying considerations.

Wheat prices (maximum price) are regulated through procuring a part of the production (almost forcibly) from the farms at prices which are far less than the world price or the free market price. The idea is to contain inflationary forces in urban areas.

Rice is procured at prices (maximum price) which are just 30% or so of world prices. Here the idea is twofold: add to public revenues by state trading in rice exports, and keep down internal prices of rice so as not to adversely affect the domestic consumer.

Sugar-cane prices (fixed price) are regulated to protect the farmer from the caprices of domestic industry which only caters to domestic requirements, and to provide a production incentive to the farmer by assuring very high returns as compared to other crops. It is seldom appreciated that the limiting factor on expansion of sugar-cane production is the availability of irrigation water.

Vegetable ghee prices (maximum price) are regulated primarily to protect the urban population. The production of this item has been nationalised.

The level of cotton prices (minimum prices) is determined primarily for providing production incentives and protecting the interests of the farmer through direct purchases by a public agency. Serious consideration is not given to prevailing international prices or on the effect of the minimum price of cotton on the ability of textile mills to compete internationally.

The official view is that the provision of support/guaranteed minimum prices have proved successful in increasing acreages and in adopting better cultural practices and new technology, which has consequently increased farm production and incomes. It would be more like it if it is said that at least wheat and rice production have been maintained, if not increased, *despite* the official pricing policy. Regulation of sugar-cane and vegetable ghee prices appears to be reasonably satisfactory. As far as cotton is concerned, it should be appreciated that the export prices of raw cotton and cotton textiles are determined by international prices which Pakistan cannot influence, that these products vitally influence the flow of cash incomes, and that it is beyond the financial competence of the Government of Pakistan to establish unrealistic support prices which are far in excess of what would be warranted by international prices. A case can be made out for a support price which is no more than the actual cost of production of a farm of average efficiency, nor would there be an unbearable burden on the public exchequer.

The treatment of the agricultural sector would be incomplete with a reference to the FARM LOBBY. Despite the apparent innocent looks of the farmer, the farm lobby is a powerful political force even in the industrialised West. In the developing countries, the farming interests form the elite ruling class. Many a powerful President of the United States has had to succumb to the political pressures from the farm lobby to protect its interests, although there may well be a conflict of interest in the context of the wider national interest. Many a powerful French President and many a powerful British Prime Minister had to make fundamental compromises to appease German farm interests in the European Economic Community. In South Asia too the farmer rules the roost. The batai system (under which the landowner and the farmer share the produce) makes the agricultural class a solid vested interest, be they landlords, or tenants, or labour. Their community of interest far exceeds that of the other economic and social classes. In fact, with very few exceptions, effective political leadership invariably rests with rural society, and in the rural society with the landowners. This, of course, raises the spectre of Economic Policy being heavily tilted towards agriculture. So far the spectre has been more imaginary than real.

# Industry and Power

## Nature, Significance, and role of Industry

Literally speaking, industry connotes any economic activity in which value is added. This would include agriculture. A narrow definition of industry would limit industrialisation to imply an absolute as well as relative growth in the importance of factories, mines, power plants, transportation, and so on. Industry in this sense would include manufacturing and closely related activities, particularly those related to the building and operation of a modern economic infrastructure. For the purpose of this chapter the scope of industry has been limited to manufacturing, mining and power. Transport and communications are discussed in the next chapter.

Industrialization may be viewed as both a cause and a result of economic development. Economic development requires and implies higher productivity per capita. As productivity increases and incomes rise, the expenditure pattern will change: the demand for manufactured consumer goods, which has a high income elasticity, will rise rapidly—more rapidly, after a while—than the demand for food and primary products.

This rise in the demand for manufactured products is likely to be particularly pronounced where development is accompanied by the transformation of a partial subsistence economy into a fuller monetary market economy. Moreover, increased productivity in sectors outside, as well as inside industry itself will call for an increased application of manufactured producer goods—machinery, tools of all kind, cement, structural steel, fertilizers. A growth of markets is only one of the necessary preconditions for actual expansion of industrial production. However, it is not only the demand for manufactured goods that will increase rapidly; so will the technical capacity of producing manufacturers, at least of the simpler kind. One can scarcely conceive of any general increase in productivity, with its associated improvements in skills, technical knowledge and institutions, which would not, among other things, involve an increased capability of producing manufactured goods of certain kinds. The development process, by increasing productive ability at the same time as it enlarges markets, virtually assures the rise of industries.

The relationship of industrialisation to economic development has been vividly analysed by Professor Gunnar Myrdal in his publication 'An International Economy': "Manufacturing industry represents, in a sense, a higher stage of production. In advanced countries the development of manufacturing industry has been concomitant with these countries' spectacular economic progress and rise in levels of living; many of its products are indeed almost symbolic of a high living standard. Not least in the under-developed countries, the productivity of man-power in industry tends to be considerably greater than in the traditional agricultural pursuits. Industrialization, and the growth of that part of the working population that is engaged in industry, is, therefore, a means of raising national income per capita. In countries like India and Japan, with a high ratio of population to natural resources and, in particular, to land, manufacturing industry represents virtually the only hope of greatly increasing labour productivity and raising levels of living, however much is done to improve agriculture. But even in countries where the population pressure is lower—as, for example, in many Latin American countries—the successful exploitation of a more favourable relation between population and natural resources requires mostly the growth of manufacturing industry."

Industrialisation is not the answer to all the economic problems that plague under-developed countries. It is wrong to assume that almost any kind of industry will help advance

these goals. Many an under-developed country has learnt to its cost that it cannot go very far in achieving total self-sufficiency and that large prestigious industrial projects can well turn out to be White Elephants. The International Monetary Fund, as early as 1950, drew attention to the desirability of adopting a balanced approach: "It should not be assumed that an excessive concentration of development in the industrial field is in the interest of the under-developed countries. Industrial development requires very large investment for each worker; the immediate cost in resources is highly relative to the number of people directly benefited. The great majority of the people of these regions draw their incomes from agriculture. The greatest improvement in their well-being would come from increasing their productivity in agriculture. This should preclude greater industrialization in these countries, but policy should be directed towards balanced development to increase production in agriculture as well as in industry".

There is no direct or indirect conflict between agriculture and industry and in effect the two sectors depend heavily on each other. Industrial expansion in the LDCs, will be cut short by lack of market if the great majority of the population who depend on agriculture will not have the necessary purchasing power; the availability of this purchasing power would depend on the development of agriculture. Agricultural development too cannot get very far unless there is industrial growth to provide the inputs (including equipment) and services essential to modernised agriculture, as also to absorb the manpower released from the agricultural sector.

It is by no means incorrect to assume that manufacturing usually pays better than the production of raw materials, that a diversified and more self-sufficient economy would enjoy greater stability than a one-crop economy, and that industrial development will add to the level of national income and help to resolve the unemployment problem.

The maximum feasible rate of industrial development is not merely a function of the availability of the necessary factors of production. Industrialisation involves structural changes in the economy, and if undue social costs are to be avoided, the pace at which such changes can be brought about is governed by considerations such as the rate of growth of agricultural production, which is not usually susceptible to sudden or rapid short-term change. Moreover, since industrial development entails profound changes in social organization, the rate at which it may proceed and still bring a net social advantage in the short run is also limited by the capacity of the community to make the necessary adjustments in relationships as well as in the mode of living. The importance of the human factor needs to be emphasised. The speed and success with which an under-developed country is able to industrialise depend in no small measure upon its human resources and their potentialities for development.

"The major capital stock of an industrially advanced country is not its physical equipments; it is the body of knowledge amassed from tested findings and the capacity and training of the population to use this knowledge effectively," writes Simon Kiznets in "Towards a Theory of Economic Growth".

The extent to which the rate of increase in industrial output is able to exceed the rate of population growth, and in due course induce a significant increase in real per capita income, is a function of new industrial investment, which depends largely upon the rate of increase in capital accumulation.

The necessity for advancing industrialisation of under-developed countries is no longer in dispute and the political decision to accelerate industrial growth has been taken in all the LDCs. Industrialised countries are popularly termed as the developed and the rich countries, while poor, under-developed and less-developed are adjectives used to describe countries which are not industrialised. Lack of industrial development is attributed to the exploitative attitude of the colonial powers, charged with promoting the production of only raw materials which they bought cheaply to satiate the appetite of their burgeoning industry. The success of the Soviet industrial policy in forming the nature of the economy has had a marked impact on the thinking

of the LDCs. In 1953, the author was referred to Mahalanobis (a noted Indian Socio-Economist) by the then Prime Minister Jawaharlal Nehru. Mahalanobis emphasised that under-developed countries should concentrate on industry and more industry, and that the heavier the industry the better the industry. Apparently the Communist ideology, which advocates a comprehensive industrial structure based on heavy industry, had seeped into the minds of those charged with the economic development of the recently liberated nations. Mahalanobis expressed this sentiment in the Bulletin of Atomic Science (a tell-tale choice of communication) in 1959. He wrote:—

“In a big country it is possible and desirable to push back the manufacturing process to the utmost limit in order to expand continually its capacity to make investments increasingly out of its own domestic resources. We may consider the case of India as an example. In India it would be economical to establish a heavy machine building industry which would manufacture heavy machines and equipment required for the installation of factories, for the production of steel, fertilizers, aluminium, etc., or for the production of heavy electrical equipment, like big generators, transformers, switch-gear, etc. It would also be economical gradually to establish large-scale industries for the manufacture of synthetic raw materials of many kinds (including the production of petrol from coal in case an adequate supply of oil is not discovered). Once such basic industries are established, it would be possible to expand the production of electricity, coal, steel, aluminium, fertilizers, mining and transport equipment, etc: and then, with the help of such heavy machinery, producer goods, and energy, to manufacture machinery for the increasing production of consumer goods”.

Thus the appeal of industrialisation not only rests on a sound economic basis, but there is also the powerful political and emotional sentiment to reverse the course of the colonial pattern and enter the Modern Age. It is widely believed, and rightly so, that a modern, progressive, productive and egalitarian society can only be built around a substantial industrial edifice.

### ROLE AND EFFECTS

The role of industry and its effects are manifold. These are:

(i) **Increase in national income:** The soundest reason for embarking on industrial development is that it increases national income. Sound industrial projects which are well run can contribute immensely to national income. The value of the per capita product is normally higher in industry than in agriculture, so that a change in employment proportions in favour of industry tends to bring an increase in total national product. This argument is based on the theory that diminishing returns are the rule in the agricultural sector. Although this view has been partially modified by the experience of the West through the introduction of new techniques, yet in the LDCs the under-employment of the rural labour force and the prospects of its increasing substantially would make it impossible for agriculture to provide a satisfactory utilisation of the rural labour force. This conclusion would reinforce the case for industrialisation.

In terms of national product, industrialisation reaches a plateau at the stage when productivity per employee increases faster in trade, distribution, administration, and so on; this stage will be reached in the LDCs, several decades hence. Theoretically, at present levels of technology, it would be possible for a country to combine a per capita income of \$1,000 per annum with 80% of the population engaged in agriculture if it could engage in international trade (imports and exports) about as large as its Gross National Product. (This finding was made in an ECAFE study in 1958). It is apparent that the position of such a country would be unstable and extremely abnormal. Thus industrialisation is the most effective way of increasing national income.

With economic development the share of the industrial sector in GNP keeps on increasing over the years. In Pakistan the share of industry, mining and power in the gross national

product at current factor cost increased from 7.2% in 1949-50 to 9.7% in 1954-55. In 1959-60 it amounted to 13.6%, rising to 16.6% in 1964-65 and to 18% in 1969-70. The figures for 1972-73, 1973-74 and 1974-75 are 17.7%, 17.7%, and 18.9% respectively. The years 1972-75 when the share of the industrial sector in GNP failed to raise substantively were also the years in which there was hardly any increase in per capita GNP.

(ii) **Increased employment:** Industrialisation creates many and varied employment opportunities which are a net addition to the level of employment and not a process of substitution. This consideration is of particular importance to countries where the pressure of population is heavy and rural under-employment is a serious problem. Almost all development plans and policies emphasise increased employment as a major objective in itself. There is no denying the fact that a shift in the employment of subsistence farmers, who constitute some two-thirds of the population in most LDCs, to industrial employment would not only vastly improve their income but also increase productivity. It has been urged that improvements in agriculture cannot proceed beyond a certain point unless the surplus labour force is progressively transferred to industry. Industrialisation in the sense of an increasing share of the employed population in industry should be an inevitable result of economic development. The figures for Pakistan of persons employed in manufacturing activity, mining and power are in Table 22.1. It should be noted that 9% of the rural labour force is employed in manufacturing activity and that 26% of the urban labour force is so employed. Of the 26% urban labour force employed in industry, roughly 10% is employed in large scale industry and the balance of about 16% is employed in Small and Cottage industries.

TABLE 22.1

	1950-51	1969-70	1974-75
a) Total labour force (in millions)	10.6	19.0	22.0
b) Industrial labour force (including manufacturing, mining and power) as % of total labour force	9.7	41.6 (or 13.29% of total population)	about the same as for 1969-70

*Source:* Planning Commission (labour force is taken at 31.8% of population and covers those able and willing to work).

iii) **Diversification of economy and economic stability:** Industrialisation diversifies the economy and agriculture no longer remains the all powerful economic sector it once was. The greater economic stability brought about by industry would actually be a by-product of bringing about a larger national income. Industrialisation which fosters the economic production of goods for domestic use (which would otherwise be imported) has an equally good stabilising effect. Consumption is, by and large, dependent on the availabilities of foreign exchange. Consumption, though, like the production of any additional national wealth, is itself an addition to national income.

iv) **Exports Import, and Balance of Payments:** With industrialisation, the export economy of an under-developed country no longer remains a one or two-crop economy. In this way it is able to mitigate the wide fluctuations in the demand for and prices of primary products that are frequently associated with international trade. Export of manufactured goods provides much needed foreign exchange earnings. Since the value added in the case of processed raw material is much more than in that of raw materials, exports per unit of the former earn more



foreign exchange than those of the latter. With the development of the industrialisation process a point is reached beyond which the exports of simple manufactures like textiles cannot be absorbed in world trade in increasingly large quantities.

This happens for two reasons: the reluctance of the industrialised countries to allow free movement of such imports and their relatively low income elasticity of demand for simple manufactures. At this stage it is necessary for LDCs to move into the export of chemical and engineering products where the value added is higher. Handicrafts of LDCs also possess a significant export potential as also a large employment potential.

Industrialisation adds to the pressures on imports, even though it substantially replaces the import of consumer goods. Many a LDC has experienced to its cost the huge demands made by imported raw materials and spare parts on its meagre foreign exchange resources, making it incumbent to resort to international borrowing to meet the requirements of its infant industry. Besides, industrialization leads to increase in national income and this in itself means a larger demand for imports of consumer goods of better quality. Inflationary pressures which are generally associated with accelerated industrial development (this is indeed true of accelerated economic development as a whole) add to the pressure on imports as do increased demands for imports of plants and producer goods not only for industry but for other sectors too such as agriculture, transport and communications. With the increase in the tempo of economic development in general the import requirements of agricultural inputs (fertilisers and insecticides and pesticides) increase by leaps and bounds.

Industrialisation which sets out to strengthen the balance of payments position creates chronic imbalances in external transactions over the first two to three decades when industry and the industrialisation of other sectors creates new demands on imported producer goods, industrial raw material and spare parts, as also durable consumer goods. The imbalance is corrected (hopefully) when the products of domestic industry cater to a significant portion of these requirements and manufactures, including sophisticated manufactures, assume the role of principal exports.

The Pakistan experience exemplifies the above-mentioned analysis. Table 22.2 illustrates the import of consumer goods (figures of which have been affected by the large quantities of foodgrains which had to be imported); import of industrial raw material and spare parts and producer goods; exports of manufactured goods; and balance of trade position.

TABLE 22.2

	1949-50	1954-55	1959-60	1964-65	1969-70	1972-73	1973-74	1974-75
a) Imports of consumer goods as % of total imports	63.2	48.8	57.8	22.1	10	29.5	23.7	22.3
b) Imports of industrial raw material and spare parts, and producer goods as % of total imports	36.8	51.2	42.2	77.9	90	70.5	66.3	77.7
c) Exports of manufactures as % of total exports	Negligible	3.4	28.6	33.2	66.9	60.6	60.6	51.6
d) Balance of trade (million rupees)	-347	-291.6	-1,042.6	-2,532.8	-1,676.5	+152.9	-3,408.4	10,383.5

Source: Statistics Division. CCI&E.

It would appear imperative that industrial development in the LDCs which are not blessed with valuable and extensive natural resources (like oil, copper, gold, etc.) should take into full account the export potential and import substitution effects of their industry.

(v) **Support to other economic sectors and to the social sector:** Industrialisation provides significant support to the development of other economic sectors as well as the social sector. The domestic availability of fertilisers, insecticides and pesticides, earth-moving equipment, tractors, harvesters and threshers, and pumps industrialises the agricultural sector and makes for more production at lesser cost per unit. Similarly local transport vehicles and road and rail-building material are a boon to the transport sector. Locally manufactured telephone and telecommunications equipment increase the effectiveness of the communications sector. Adequate industrial capacity for printing, manufacture of drugs and pharmaceuticals, and building material (cement, mild steel bars, plumbing and electrical goods) accelerates the growth of the social sector (education, health and housing). Besides industrial development on a planned basis progressively provides from indigenous capacity a substantial part of the raw material, spare parts and produce goods required for the industrial sector. The efficiency of the industrial sector is also in turn influenced by the development of the social sector and that of other economic sectors.

vi) **Defence:** The defence potential of a country is basically determined by its industrial base, and more so by its heavy industrial base which mostly consists of sophisticated engineering, electrical and chemical manufactures. The requirements of defence for manufactured goods are much more than just arms and ammunition. They embrace a wide array of manufactures covering transport equipment, bridging equipment, plastic goods, wearing apparel and boots, electronic equipment, and so on. Every country which plans a sufficiently deterrent defence potential has to rely quite heavily on its domestic industry.

In the fifties and the sixties India successfully embarked on the development of a heavy and defence-oriented industrial base. It paid for it, and still continues to do so in terms of reduced availabilities for consumption resulting in high prices and shortages of essential consumption goods. There was many an ignorant and short-sighted person who gloated over the economic distress of the teeming millions in India. The author brought this trend to the notice of the Pakistan Government at its highest levels and pointed out that the economic distress in India was a result of a deliberate policy to accelerate the growth of heavy and defence-oriented industry and the expense of consumption. Whatever the moral and the economic arguments against such inhuman policy the Indian planners were successful in achieving what they set out to do. A modern and powerful military machine, substantially based on domestic industry, was established and poses a real threat to India's immediate neighbours.

In Pakistan a wonderful opportunity to promote heavy industry, which would have a defence bias, was lost in the early sixties on account of faulty judgement in the cases of two key industrial projects which would have added new dimensions to Pakistan's industrial strength—one was the Karachi Steel Mills and the other related to the basic manufacture of a transport vehicle (truck) which would serve civilian and defence needs. A European consortium consisting of Rheinstahl of Western Germany, Sybetta of Belgium, Snyder Crusoe of France and a British manufacturer presented a detailed project for the manufacture of some 500,000 tons of steel products (the capacity could be raised to one million tons). Their financing was firm, the steel mill would be operative by 1965, and they enjoyed a competitive price edge over the American Consortium (consisting of Westinghouse and Swindle Dressler). The American financing was not firm, and, therefore, there could be no guarantee with regard to the time of commencement of commercial operations. The then Planning Secretary (the late Mumtaz Hasan) assisted by the present Federal Industries Secretary (N.N.A. Qureshi) urged the acceptance of the offer of the European consortium. The Industries Ministry, however, managed to secure a Governmental decision in favour of the American Consortium. The reasons advanced for this decision were that the Steel Mill was a prestigious project and the Americans would be upset if they did not get this project; for good measure it was also argued that European credits could be easily utilised for other industrial projects but American financing was not popular in the private industrial sector. The then Finance Minister considered the Steel Mill to be a white elephant and his preference for the American Consortium was in the nature of a delaying tactic. Prime Minister Bhutto was at

that time an effective and eloquent member of President Ayub's Cabinet and he favoured the European Consortium; unfortunately he was abroad at the time of the Cabinet decision otherwise it may well have been that his eloquence would have carried the day. Anyway the Steel Mill is going to be 16 years too late. The 16 year delay in establishing the Steel Mill would have directly cost the country 16,000 million rupees<sup>1</sup> in lost production and 560.64 million lost man-hours<sup>2</sup> of productive work, not to count other direct and indirect effects on defence in particular and the economy in general. The second critical error made was the choice of the Mack Truck for progressive manufacture. Little was it appreciated that the Mack people specialized in heavy trucks which were sold at prices which Pakistan could ill-afford. Pakistan's basic requirements were for medium and light trucks which could utilize the road system. Pakistan, as the author had then pointed out, could not afford the luxury of Rolls Royce vehicles. The result is that till the end of 1975 there has been very little worthwhile development towards the progressive manufacture of commercial and defence transport equipment.

The Machine Tool Industry, the heavy engineering and electrical complexes, the plastic and chemical industries,

**Note:** 1.  $\frac{1}{2}$  million tons  $\times$  16 years or 8 million tons  $\times$  2,000 rupees per ton = 16,000 million rupees.

2. 12,000 man  $\times$  8 hours per day = 96,000 man hours per day.

= 96,000  $\times$  365 = 15,040,000 man hours per year

= 35.04 million man hours  $\times$  16 years

= 560.64 million man hours.

light engineering and electronic industries, and even textile and food processing industries have in their own humble but effective way contributed their mite to strengthening Pakistan's defence potential. But a lot more remains to be done and probably the best way of going about it would be in close collaboration with the Muslim countries of the Near and Middle East, as also of South East Asia.

vii) **"Spread" effects:** Industrialisation, apart from directly creating additional employment opportunities, also indirectly affects the demand for labour in the entire economy. In the LDCs the diffusion of expansionary impulses from industrial growth is much less than in the industrialised countries, although it is by no means limited or inconsequential. The expansionary impulses generated by industrialisation should give added momentum to a cumulative process of economic growth all round. The low elasticity of supply that characterises LDCs in the short run prevents the multiplier effect from running its full course and the leakage of increased demand towards imports further reduces the multiplier effect. The "spread" effect of investment in industry on incomes and employment in other sectors is relatively limited in the case of the under-developed countries as compared to the industrialised countries.

One very significant "spread" effect of industrialisation is the change in attitudes, institutions, and, in effect, in the way of life. Industry introduces the practice of discipline and of rationalisation; side by side with institutional changes in the development of markets. There is a new spirit of enterprise and skills are more rapidly spread. The traditional easy-going way of life, in which the family was the pivotal economic and social unit, is replaced by tension and more impersonalised relationships. Industry creates problems of urbanisation and the public authorities are hard pressed to cater to the growing requirements for education, health, housing, water and sanitary facilities for the increasing influx of humanity into urban centres. Social problems of a serious nature threaten the very basis of society; the traditional value system and family influence are replaced by vulgar and materialistic pretensions under the guise of a progressive and liberal tradition. This indeed is the price which all countries, barring very few, have paid and continue to pay for accelerated industrial development.

Another criticism of industrial development, which is not really a valid one, relates to social strife which characterises industrial relations. The employer-employee problems in industry are no worse than those of the landlord and tenant, or, as a matter of fact, no worse than those who direct activity and those who undertake it. There is also little logic in blaming the capitalist or the mixed economy for this state of affairs. Recent history abounds with instances where labour agitation in some Eastern European countries had to be controlled through the use of brute force.

Nothing worthwhile is an unmixed blessing. On balance industrial development solves many more problems than it creates, and even these few problems can be satisfactorily resolved given wise and imaginative planning and leadership.

## Process of Industrial Development

The process of industrial development covers a huge field and it would be difficult to deal with it exhaustively. In this section discussion is restricted to stages of industrial growth, criteria for selection of industries and the direction of industrial growth, the choice of scale and techniques of production, standardisation, productivity (including transfer of technology), investment promotion, the Industrial Investment Schedule, financing of industry, and location of industry.

**Stages of industrial growth:** Industrial development is normally an evolutionary process and higher levels of development are attained in stages. The first stage of industrial activity is confined to the processing of primary products: milling grain, expressing oils, curing fish and meat, preparing skins and furs, tanning leather, melting the more readily reducible ores, spinning fibres, and preparing timber.

The second stage of industrial development generally comprises the transforming and processing of materials for food, clothing and their consumer goods. This group of industries includes bread-making and confectionery, hard and soft drinks, footwear, horse-shoes and ploughshares, and other metal goods, cloth and clothing, furniture and paper. Industries which are slightly more sophisticated such as vegetable oil, cigarettes, matches, sugar, leather and rubber goods, cement, light engineering goods, light electrical goods, simple dyes and chemicals, and drugs and pharmaceuticals are also considered to be in the second stage of industrial development.

The third stage of industrial development concentrates on the manufacture of industrial raw materials and spare parts, assembly and some domestic manufacture of durable consumer goods (such as radios, television, refrigerators, air-conditioners, motor-cars, trucks and buses, scooters), inputs of the agricultural sector (fertilisers, insecticides, pesticides, assembly and progressive manufacture of farm equipment, pumps), basic manufacture of steel, oil refineries, petrochemicals, heavy chemicals and light generators and transformers.

The fourth stage of industrial development is a continuing process and is co-terminus with the extension of the human frontiers of innovation and sophistication. The industries are of the really heavy type and involve basic manufacture. The application of science and technology on an intensive and extensive scale as also the huge investments needed to establish and thereafter sustain these industries are the hallmarks of this group of industries.

It would be observed that the value added by the industrial process increases as we move into higher stages of industrial development and so does the capital intensity. Labour intensive industries are by and large limited to the first and second stages of industrial development although there are substantial prospects for labour intensive techniques even for industries in the third stage.

Even in a highly industrialised country it is a common sight to witness all four stages of industrial development. There are no water-tight compartments nor is there any rigidity on any country proceeding apace with industrial development stage by stage. The centrally planned economies and India have concentrated on heavy industries, or the "metal-eaters" as they are called, and their idea is to establish the economic structure on the basis of heavy industry. The general practice is to support heavy industry on a firm economic base so as to avoid the populace going through a long period (anything from 20 to 30 years) of hardship and economic distress. Countries which accept the philosophy that "the end justifies the means" could certainly base their economic structure on a heavy industrial base and thereby strengthen their defence potential and capability of manufacturing producer goods over a much shorter period of time than those countries, which proceed step by step. The latter, of course, preserve their fundamental freedoms and are spared the ordeal of development through self-sacrifice.

In Pakistan the first two stages of industrial development have been more or less completed and the third stage successfully launched. At the rate at which we are proceeding Pakistan should enter the penultimate stage of industrial development in 1985.

**Criteria for selection of industries and direction of industrial growth:** The selection of industrial projects must be made against the background of the entire economy, particularly the stage in its economic development. It must be kept in mind that the main problems of industrial development are to increase GNP and per capita incomes, increase employment opportunities and labour productivity, and strengthen the balance of payments situation by increasing the export potential and/or augmenting the scale of import substitution through increased industrial production. It should also be considered that economic development requires increased capital formation and investment, that shortage of capital is the major obstacle to industrial development, and that net investment by LDCs has to be 6 to 9% of GNP to maintain existing living standards and 12 to 18% to maintain the current relative economic position vis-a-vis developed countries.

The following criteria are applied in choosing industrial projects and the direction of industrial growth:—

(i) **Gross National Product Criterion:** Industrial projects which contribute substantially to GNP should be given preference. The greater the value added by an industry the higher should be its priority. Apart from national profitability, these industries also enjoy commercial profitability and give a high return on investment. Commercial profitability is the net profit after taxes and all costs, including depreciation. The lower the capital-output ratio, the greater the value added with a given capital investment. Where the capital-output ratio is high, an increased amount of capital would be required to obtain the same output. Thus LDCs, which are chronically short of capital, could increase their GNP much more if they concentrate on projects with a relatively lower capital-output ratio. Projects in which the input-output ratio is more favourable will add more to GNP with lesser resource utilisation. The lower the input-output ratio, the better the industrial project in terms of providing additions to GNP.

(ii) **Labour Intensity Criterion:** In the LDCs it is labour intensive rather than capital extensive industries that should be encouraged in view of the abundant supply of labour. Labour-saving technology is not of great value in an economy which is over-populated. Whenever there is a choice in the methods of production, capital should be used sparingly in relation to labour. The labour intensity criterion for selecting industrial projects may conflict with the dictates of productivity and application of new technology. Here the choice may well prove difficult and each case would have to be judged on its own merits in regard to its repercussions on international competitiveness and defence.

(iii) **Foreign Exchange Benefits Criterion:** In view of the almost universal prevalence of foreign exchange difficulties experienced by LDCs embarking on worthwhile plans of industrial development, it is not surprising that the foreign exchange benefits criterion is frequently the determining factor in the selection of projects for industrial development.

The Planning Commission conducted a study in Pakistan in 1957-58 for evaluating the comparative foreign exchange benefits of investments in different types of industrial projects. The method employed by the Planning Commission was both pragmatic as well as adequate.

I) Foreign exchange benefits of investments in industrial developments are of two types: (a) the foreign exchange savings that may be effected by substituting domestic production for imports, and (b) the foreign exchange earnings that may be realized by producing for export.

II) Absolute foreign exchange benefits, set forth in millions of rupees, afford no basis for judging the comparative advantages of investment in different industries. For purposes of comparison, annual foreign exchange benefits are best expressed as a percentage of investment.

III) Absolute foreign exchange benefits are computed in the following way:

a. Determine gross foreign exchange benefits.

(i) Compute gross foreign exchange savings by multiplying the annual volume of imports displaced by domestic production by the c.i.f. (cost, insurance, freight) unit price of such imports. (Domestic handling costs, customs duties and excise taxes cannot be included in price, since they are paid in rupees rather than in foreign currencies).

(ii) Compute gross foreign exchange earnings as follows:

(a) In the case of products made from materials that would not otherwise have

(b) In the case of products made from raw materials that would otherwise have been exported, compute the gross foreign exchange earnings obtained by investment in domestic processing as follows:—

- (1) Multiply the annual volume of exports of the product by the f.o.b. (free on board) unit price of such exports.
- (2) Multiply the annual volume of raw materials incorporated in such exports by the f.o.b. unit export price of such raw materials.
- (3) Subtract (2) from (1).

- (i) In the case of projects financed entirely from domestic sources, foreign exchange costs include (a) the cost of imported materials, fuel and spare parts, (b) the convertible portion of foreign fees and salaries, and (c) depreciation on the foreign exchange component of the investment in the fixed capital.
- (ii) In the case of projects financed in part from foreign sources, annual foreign exchange outlay will also include (a) interest on bonds and (b) dividends, if any, on shares that are held abroad. If industries are to be compared in abstract terms, without regard to the source of their financing, these items may be ignored. When particular schemes are to be compared, however, it must be taken into account.

- (a) Where the purpose is to compare the advantages of different investments in terms of the total investments they require, determine the net foreign exchange benefit per rupee of total investment by dividing the total investment into the net foreign exchange benefits.
- (b) Where the purpose is to compare advantages in terms of foreign exchange required, determine the net foreign exchange benefit per rupee of foreign exchange invested by dividing the foreign exchange component of investment into the net foreign exchange benefit.
- (c) Comparisons may properly be made on either basis, but the sets of percentages should not be confused.

Daudkhel Cement Extension	70 %
Multan-Lahore Pipeline during first years	40—50 %
during later years	100 %
Mangopir Cement Plant	38—48 %
Multan Gas Fertilizer Plant	35 %
East Pakistan Gas Fertilizer Plant	24 %
Multan Steel Plant	15 %
Additional Jute Looms	6 %

The following comparisons of foreign exchange benefits per rupee of investment in the private sector were made in 1957.

	<i>Benefits per rupee of :</i>		
	Total Investment	Foreign exchange component of Investment	Ex-change
Coal Mining	125%		250%
Tanneries	69%		130%
Sulphuric Acid	48%		86%
Soda Ash	38%		51%
Sugar Mill	30%		65%
Dyes	28%		50%
Sheet Glass	24%		46%
Power Alcohol	15%		20%
Cotton Textiles:			
(i) Savings on production for domestic consumption	22%		34%
(ii) Earnings on production for export	11%		17%

These figures may not be valid for 1975 but they are close enough approximations. It should, however, be appreciated that over-valuation of the currency creates strong pressures for the import of capital goods and raw materials, and the availability of foreign exchange to industry at official rates really amounts to a subsidy.

### THE CHOICE AND PITFALLS

Other considerations involved in the selection of industrial projects is the size and complexity of the industry. In the beginning enterprises calculated to develop entrepreneurship should be encouraged. These include rudimentary production techniques and simplicity in terms of finance. Corporate techniques of mobilising capital and spreading the risks involved are more complex in character. An individual project should be judged not only in terms of its current worth but whether the project would fit into the economy of tomorrow. To begin with, industrial development in an under-developed country should concentrate on agro-based industries which utilise the primary products and agricultural waste available in the country and on the current and potential domestic market for manufactured goods.

Increasing the exports of processed raw materials and manufactured goods is a rather attractive route to industrial development but it can lead a country into serious trouble for reasons generating outside national borders such as administrative and fiscal barriers imposed by an importing country, changes in demand and, more so, excessive variations in demand.

Domestic markets are rather reassuring and tend to grow with the development of the economy and the national income. Industrial projects which take into account the complex inter-relationship in the economy and between the national economy and the rest of the world, can be eminently successful. Analytical techniques alone cannot ensure successful investment. What is required is a sound combination of sound nature judgement and complete information of all the known economic and political facts of life.

Attention should be given to those industrial projects which can produce goods currently being imported and to those industrial projects which have succeeded in other LDCs. It must be remembered that the profitability of any industrial projects depends on the correct estimation of the cost of production, and selling price. Industrial development to be a success should be planned ambitiously and on a large scale, and in coordination with the other economic and social sectors.

In the labour-abundant and capital-scarce economies of LDCs, it is imperative that existing capital be used and new capital created in ways designed to achieve the maximum production or employment or both. The employment problem here has some special characteristics, and the full employment concepts in advanced urban-industrial economies have limited application.

Fiscal and monetary measures which attempt to stimulate employment through income generation, for example, are likely to lead to inflationary pressures and balance of payments difficulties long before the labour force is fully employed. The LDCs have a large agricultural labour force but comparatively little capital and technical knowledge at their disposal. Their general condition of under-employment is likely to be intensified as the ratio of population to arable land becomes higher. In addition to this extensive rural under-employment, there is, in some countries, a more open or obvious form of urban unemployment, which usually has sharper political implications, and which may often be due simply to the greater social and psychological attraction of city life.

Governments of the LDCs are anxious to achieve a fuller and more complete participation of the labour force in the production process, which means avoiding open urban unemployment in the immediate future and, in time, reducing rural under-employment. To that end, it is important for planning authorities to choose a technology that will make the most efficient use of labour and capital.

Two quite different policies have been proposed for the allocation of capital, which is in large part a question of allocation of new investment, since the possibilities of employing the existing capital stock in new and different ways are more limited. These two contrasting policies may be characterized as the labour-intensive solution and the capital-intensive solution. Those favouring labour-intensive methods, being actually aware of the basic fact that capital is in short supply in Asia, emphasize the short-run employment needs and the difference in productivity of capital in various uses. They prefer those investments that would minimize the capital-output ratio and the capital-labour ratio. In so far as these labour-intensive methods are typical of small-scale industries (particularly if no power is used), there is an implied preference for the smaller scale establishments and perhaps also, although this is less clear, a preference for certain industries as a whole offer greater opportunities for labour-intensive methods.

The capital-intensive solution stresses the rise in production per capita in the longer run and the increased productivity of labour, contending that only through the maximization of the capital-labour ratio can labour productivity be raised, the rate of investment be increased and desired demographic changes (such as reduced family size) be achieved. In reality, of course, those making investment decisions are not faced with such sharply defined economic alternatives. The picture is often blurred in particular country conditions. The nature of each industry, the product or process, has a great bearing on the form taken by the investment.

Commenting on the choice of industrial technologies and techniques, Gunnar Myrdal has rightly pointed out in "Asian Drama":

"An essential element of the industrialization ideology is the hope and expectation that newly-launched industrial establishments will bring with them the powerful modern techniques used in advanced countries. Modern industry, using power and machines, is, of course, much more capital-intensive than are traditional methods of production that do not utilize power and machines. Indeed, this is one of the crucial facts about modern technology. Heavy industry requires especially large and expensive installations. But whatever the type of output chosen, modern industrialization will raise the average level of capital intensity for the economy as a whole. This will occur not simply because of the investment poured into individual plants but also because of heavy supplementary outlays on power and transport facilities, which are inherently capital-intensive."

In quite a few industrial projects the choice of techniques is determined by the technological facts of production. For example, in the case of heavy industry, the employment factor can by no means suggest the size and technology of the industrial unit. Besides, heavy industry develops a large employment potential in the long run as it caters to the requirements of other industries and economic sectors which are not so capital-intensive.

Besides the LDCs could effectively utilise second-hand machinery which has been discarded by the industrialized West because it was relatively labour-intensive and labour was becoming an expensive and rather unstable factor of production. The uncertainties relating to the supply of spare parts for such machinery and the problem of valuing it deter the LDCs from buying second-hand machinery on a large scale. Besides, it hurts their self-respect to make do with the second best.



In the ultimate analysis one could hardly disagree with Myrdal's conclusion that even if highly labour intensive techniques were adopted in South Asia's modern industrial sector, there would be little change in the proportion of the total labour force it absorbed. It is to the small industries and handicrafts sector that we must turn to provide increasing employment opportunities in the industrial sector.

**Standardisation:** Standardisation is the *sine qua non* of rationalisation in production and consumption. Since standardisation can play a vital role in the economic and industrial development of a country, the Pakistan Standards Institution was established as an autonomous body in November, 1959, under the Societies Act, XXI of 1860, with the following objectives:—

- (a) (i) To consider and recommend to the Government National Standards for the measurement of length, weight, volume and energy.
- (ii) To prepare and promote the general adoption of Standards on national and international basis relating to structures, commodities, materials, practices, operations, etc., and from time to time, to revise, alter and amend the same.
- (b) (i) To promote standardisation, quality control and simplification in industry and commerce.
- (ii) To secure compliance with the Standards adopted by the Institution by the producers and users.
- (iii) To provide for the registration of the standardisation marks applicable to products, commodities, etc. for which the Institution issues Standards to be branded on or applied to those products and commodities which conform to the Standards set.
- (iv) To provide or arrange facilities for examination and testing of commodities, processes and practices for any investigation or research that may be necessary.
- (v) To co-ordinate the efforts of producers and users for the improvement of materials, products, appliances, processes and methods.
- (vi) To promote establishment of laboratories in Pakistan for testing commodities and products of industries according to the Standards adopted by the Institution.
- (c) (i) To collect and circulate statistics and other information relating to standardisation in all its branches.
- (ii) To establish, form, furnish and maintain libraries, museums and laboratories for the purpose of furthering the practice of standardisation.
- (iii) To communicate information to members of matters connected with standardization and to print, publish, issue and circulate such periodicals, books, circulars, leaflets and other publications as may seem conducive to any of the objects of the Institution.
- (iv) To adopt such measures and take such steps and do all such things as may be conducive to the promotion of cordial relations between the Institution and persons interested in the objects of the Institution.
- (v) To establish, subscribe to, promote, and become member of, support, co-operate or amalgamate with any other Association, Society, Institution or Council, whether incorporated or not, whose objects are altogether or in fact similar to those of the Institution.
- (vi) To secure the recognition of the Institution abroad.
- (vii) To do all such other lawful things, as the Institution may think identical or conducive to the attainment of any or all the objects of the Institution mentioned above.

In order to boost our exports and to help the country in its economic development by mass production of quality goods in all the industrial fields, the following six divisions have been established: Chemical Division, Mechanical Division; Electrical Division; Textile Division; Building and Building Materials Division; and Food and Agriculture Division. The problems presented by each in standardisation are especially acute in respect of small-scale industries.

It is expected that as soon as the adequate technical staff and necessary funds are available the Institution will be able to speed up its work or preparation of standards to make up the deficiencies of the past and to meet the ever-increasing demands of the country.

The question of introducing Certification Marketing was discussed in the meeting of the General Council which later considered a draft Certification Marking Act. The draft is now under the consideration by the Government.

**Productivity:** The concept of Productivity may have taken a formal shape only in recent years. It has, however, been practiced from time immemorial. For centuries Man has attempted to better his lot by increasing production with a given amount of effort. He has rotated his crops, irrigated and drained his land, used agricultural implements, sown richer crops, introduced motive power, etc., in order that he might reap a bigger harvest with the same if not with a smaller effort. Consciously or unconsciously, as individuals or on an organisational basis, we are constantly, striving to increase productivity, that is, to get more with the same amount of effort. Productivity does not wholly depend on individual efforts. It is to a considerable degree determined by a large number of political, social and economic factors. Illustratively, if the basic socio-economic infrastructure is not there one cannot reasonably expect any economic unit to function at maximum efficiency. Adequate means of transport and communications, power and education are necessary pre-requisites for accelerated economic development in general and for increasing productivity in the industrial sector in particular.

Let us briefly run through the various resources that lead to increased productivity.

First and foremost are plant and equipment. There have been unprecedented improvements in technology during the post-war period and we have machines which today produce twice or more with half or even less than half of the labour force during a given period of time. The more automation you have the greater the increase in productivity of labour. Here, of course, a line must be drawn, without at the same time denying to the country the advantages of harnessing the improvements brought about by science and technology.

LDCs have a large population as compared to the employment opportunities obtainable in the country. A sound balance has, therefore, to be drawn up between labour-saving devices and the desirability of providing employment opportunities in as large a measure as possible. It is true that in the long run automation creates still greater employment opportunities by increasing the Gross National Product. No country can, however, be too oblivious to the short-term difficulties which would follow from increased automation. This policy of ours is illustrated by the approach to small industries, particularly those engaged in the manufacture of handloom cloth. The productivity of a textile mill worker is far higher than his handloom counter part. Yet the handloom industry is being propped up by deliberate Governmental policy, such as limiting the number of looms which any textile mill can instal and thus ensuring continued supply of yarn for handlooms. Handlooms are being gradually converted into power looms.

Second is the upgrading of technical skills. Workers have to be trained to work better with new and improved tools which take less time to do a given job as compared to that required by using the traditional techniques of production. Vocational training centres, polytechnics and institutions such as PITAC are being established on an ever-increasing scale to cater to this essential requirement. It has been found that, given the right training, people are gifted with the required physical and mental aptitudes which go to make a useful skilled worker. As long as institutional facilities for training workers are not abundantly available, greater emphasis will have to be placed on on-the-job-training.

Third is the availability of sound and efficient management. Productivity in industrial enterprises is primarily the responsibility of management. It is they who must get the most out of their men and their machines, of course, having regard to the labour laws of the country and the desirability of providing an economic rate of depreciation in their plant. The management must secure an optimum combination of labour and equipment so as to secure the largest possible output.

It was Professor Lionel Robbins, now Lord Robbins of Claremarket, who said that Economics primarily dealt with the distribution of scarce resources amongst competing ends. In that sense, productivity and Economics can be regarded as synonymous terms, for is it not the concept of productivity to stretch limited resources to the furthest extent possible? In a country such as Pakistan, where material resources, particularly those which can earn foreign exchange, are relatively limited, all-out attempts should be made to increase production by the most efficient

utilisation of available resources. Ours is an economy of scarcity not one of plenty. We can turn it into an economy of plenty if we strive very hard to make the most of our scarce resources. To achieve this end it is absolutely necessary to practice the concept of productivity on as wide a scale as possible in the light of our current socio-economic conditions.

Broadly speaking, increase in productivity should give us three immediate benefits: increased availability of goods, better quality of merchandise and lower costs of production.

The first of these benefits would increase the size of the cake and there would be more of it to be shared by all—the investor, the paid executive and the worker.

As far as quality control is concerned, it should be stressed that no Government, or for that matter no consuming public, will tolerate sub-standard goods for any length of time. There does not seem to be any earthly reason why we in Pakistan cannot successfully achieve and maintain quality control over production. Our plant and equipment is, in most cases, the latest available. Supervisory technicians are being trained locally, and if for one reason or the other they are not available, it is not difficult to obtain the services of foreign technicians. The only reason which comes readily to one's mind is the inertia of the active factors of production. Just because labour is assured of its wages and the entrepreneur of a safe and protected domestic market does not mean that they can get away with anything short of murder. This kind of situation has to be remedied, preferably by persuasion and failing that by direct and by Governmental intervention. All participants in the industrial sector should note the signs of the time and endeavour to keep satisfied customers, both at home and abroad.

Last but not least is the cost factor. Increase in productivity should lead to a decrease in the cost of production. The question of distributing the gains in productivity between the investor, the worker and the consumer has been discussed at length in a number of learned treatises and conferences. It is generally accepted that an increase in wages should be linked with an increase in productivity. There is, also, a large body of opinion which favours that a part of this gain be passed on to the consumer in the form of lower prices and to the investor in the form of profits which can be re-invested in plant and equipment for modernising industry. In this context it should be emphasised that the export price of manufactured goods should be internationally competitive and the domestic retail price should compare favourably with that prevailing in the retail markets of other countries.

Most Pakistani materials are being processed within the country on an increasing scale, capacity is also being developed in the engineering and chemical sectors on a large scale. It is to manufactured goods that the country will have to turn to provide for a substantial increase in exports. Local manufactures cannot earn foreign exchange to any considerable extent unless the quality and price factors are more than satisfactory. The productivity movement can thus play a crucial role in helping to attain a viable balance of payments position. Increasing volume of industrial production of high quality produced at internationally competitive production costs should be the end result if the concept of productivity is really practised.

**Investment Promotion:** Governments of under-developed countries have to play an active role in promoting industrial investment in the private sector. In Pakistan the Investment Promotion Bureau was set-up in the Ministry of Industries in April, 1959, in pursuance of the declared objective of the new industrial policy to give the "maximum scope to private enterprise in the development of the resources of the country". The Bureau's main task is to promote foreign as well as local private investment in industry with a view to realising the targets of the country's industrial development plans in the private sector. In order to achieve this objective, the Bureau provides the following services:

(i) Receives all applications for the establishment of new industrial concerns, progresses them with the relevant Ministries and departments of the Central and Provincial Governments and communicates the final orders of the Government within the shortest possible time.

(ii) Disseminates information regarding investment opportunities and conditions in Pakistan, and offers advice and guidance to investors.

(iii) Assists foreign and local investors actively in obtaining import licences, land, controlled building material, power, water, railway sidings, raw materials, technical help or advice and any

other facility for which the approval of the Central or Provincial Governments or statutory bodies is necessary, and in solving any problems or difficulties encountered by them.

The Investment Promotion Bureau is intended to be the clearing house for all problems which investors may face. The idea that inspired the setting up of the Bureau was to establish a central office in the Government, to which investors could refer not only their investment proposals but also their difficulties, without having to go from one agency of the Government to another to ensure speedy action on them.

In order to discharge its responsibilities effectively, the Investment Promotion Bureau, in addition to maintaining close liaison with the various Governmental, semi-governmental and non-governmental organisations connected with various aspects of industrial projects, remain in close touch with Pakistan's embassies and consular offices overseas, keeps them advised of our development programmes in the industrial sector and seeks their assistance in exploring avenues for attracting foreign investment. Cells are expected to be established in due course in a few of our larger Missions for direct liaison with the Bureau.

The activities of the Investment Promotion Bureau relate to granting permission for all cases involving foreign investment or payment of royalties to foreigners, securing facilities for all industrial investors, and undertaking publicity and promotion measures for attracting foreign investment.

## MEASURES TO PROMOTE INDUSTRIALISATION

Governments of LDCs have to adopt a number of measures and policies to promote industrialisation. They may be grouped as follows:—

- (i) **Primary function:** Maintenance of law, order and justice, national defence, roads and communications, and health and education services may be regarded as primary functions of government. The need carrying out these functions efficiently is widely recognized. However, since provision of the main economic and social services has a particularly close bearing on industrial development, the necessity of providing these services on a scale adequate to the requirements of a growing industry may require special notice. From the point of view of economic policy, the development and maintenance of transport and communications is of special significance because they have the effect of creating "external economies" which are vital for the successful establishment of a number of industries. It is important to plan and develop these services with an eye to future requirements.
- (ii) **Monetary framework:** The central problem of monetary policy in a developing economy is that of reconciling the necessity of creating credit to meet the financial needs of the growing industries on the one hand, and of achieving a reasonable price stability on the other. If the creation of credit leads to inflation, it may adversely affect industrial development. Inflation creates social tension, reduces the incentives to save and results in misdirection of resources. Since such an atmosphere is not conducive to promoting industrial growth, the expansion of credit must be kept within limits. One means of achieving that end is to prepare a credit budget covering the activities of all the public and semi-public financial institutions which may have been established to help meet the credit needs of the industry.
- (iii) **Institutional framework:** Industrialisation in the ECAFE (Economic Commission for Asia and the Far East) countries implies among other things changes in social institutions, laws, traditions and customs which profoundly influence the functioning of the economic system. The task of creating new institutions and passing new laws, and frequently also of giving authority and sanctity to new customs and traditions devolves upon the government. The wide range of measures and policies involved begins with the reforms of inheritance and tenancy laws and extends to the introduction of new laws relating to factories, organization of companies, and creation of special institutions. Many of the LDCs have made notable progress in adopting general legislation essential for undertaking production, trade and commerce on modern lines. Apart from gov-

ernmental assistance in the fields of capital and credit, however, much remains to be done by way of evolving institutions designed to accelerate the process of industrialization by ensuring better marketing conditions and encouraging new enterprise, research and innovation.

In order to encourage invention and induce entrepreneurs to venture into new fields, governments may take various measures or create various institutions. The more important of these are (i) patents acts; (ii) regulation of monopoly; (iii) geological survey, and (iv) industrial research councils. The most important thing a government can do to help private industry is not to get in its way. The success of private business in industry in advanced countries is largely due to the freedom it enjoys to make its own decisions on economic grounds and to carry out the policies it considers commercially sound. This holds for under-developed countries too. Some controls, such as labour and anti-monopoly laws, are necessary and some other restrictions, such as foreign exchange controls, are required, at times. Government interference with private business should, however, be kept to a minimum, or the economic advantages of private industrial ownership will be lost to the country. A country seeking to develop would be well advised to review annually all its legislation and regulations affecting private industry and retain only those restrictions and controls which are found to be essential.

- (iv) **Marketing:** Industries face serious marketing problems in the LDCs although this handicap is being progressively removed. Even so governmental interference with the market mechanism leads to the unnecessary piling up of stocks. Standardisation of products would be particularly helpful to export-oriented industries.
- (v) **Tax measures:** One of the most practical ways to encourage private investment in industry is to give tax exemptions. This device really costs a country almost nothing, since most of the taxes which are foregone would never have existed anyway, for they relate to profits of business investment which otherwise would not have been made. Temporary tax exemptions, to the extent that they attract new investment, constitute a means to increase government revenue, for they help to build up the base of industrial income which will later be taxable. From the more important viewpoint of developing the economy, tax concessions can be a powerful force for inducing more investment at practically no cost to the country. For the potential investor, nothing can be more tangible or attractive than a tax exemption or reduction, for it represents a direct increase in the return he expects to make at any assumed level of pre-tax profits. The effect of such an improvement in profits after taxes is to make financially attractive and commercially feasible many projects which would otherwise be so marginal that they would never be undertaken. The disadvantage of tax exemptions is that they give a new project a preferred position over existing firms which have done basic pioneering in industrial development. Despite this valid objection, the device works and an under-developed country can ill-afford to forego the development it can bring. Other tax measures consist of concessions on customs duty and sales tax payable on the import of capital equipment and a system of permitting liberal depreciation allowances for tax purposes. Sometimes capital gains are not taxed at all or let off lightly. Losses in one year or over a period of years are allowed to be offset against future profits. A specified portion of income is exempted from income-tax if invested in an approved undertaking. These and other tax measures are designed to help the prospective investor and eventually build up a larger tax base in the future.
- (vi) **Protection of domestic industry:** The chief justification usually made for the use of tariffs to protect a domestic activity is the "infant industry" argument. Two points require emphasis in the present context. The first is the fact that the industrialization of an under-developed country might invoke not only an "infant industry" argument but also an "infant country" argument. The second is the assumption in the traditional argument that the "infant" has a reasonable chance of growing up into self-reliant manhood.

Comments submitted by the author to the Government of Pakistan on 31 July, 1963, still hold good to-day in so far as patronising Pakistan products is concerned:

"I entirely agree with Dr. Abdus Salam that we must make up our minds firmly that we will use Pakistani products. The phenomenal industrial growth that we have witnessed in Pakistan is primarily due to the fact that industry over here has enjoyed a sheltered market. It is not necessary to repeat the well-known infant industries argument. We should be prepared to even go beyond it. Since we are deciding to get into a heavy industry with open eyes and contrary to the economic doctrine of international comparative costs, we should not quibble too much about the cost of production of such units. Their cost of production is bound to remain high for a long time, and in the earlier stages even production may not be of the quality that one finds in the more developed countries.

"Defence, WAPDAs, Railways, and P and T should not be permitted to say that they will buy their requirements from abroad instead of from within the country because their rupee budgets are limited and they have to make their purchases within those limits, or because, being commercial concerns, they must economise on their purchases. The Ministry of Commerce should not hesitate to agree to banning the import of such items as are produced within the country, instead of comparing the local cost of production with the C and F (Cost and Freight) cost of similar products and allowing some imports in order to promote industrial efficiency within the country.

"Let us also be prepared to face the situation that it will not be possible to export the products of our heavy industry unless some form of subsidy is given—either direct Government subsidy, or a much higher domestic price to offset losses on exports. The Soviet Union paid a heavy price for the development of its heavy industry. China is doing the same to-day. We should be quite clear in our minds that we cannot expect to establish heavy industry in the country as rapidly as we desire unless we too are prepared to make some sacrifice."

All policies and measures designed to promote private industry will come to naught unless the private investor, local and foreign, is reassured against the possibility of nationalisation. Potential investors see no point in investing their time and money in a new industrial project if it is likely to be taken over by the government when it starts making money. Private investment will only be forthcoming if it is given a general and long-term guarantee against nationalisation. Guarantees extending for a period of 10 years or so after commencement of commercial operations should be adequate. The basis of compensation at the time of nationalisation should also be clarified well in advance. Compensation should be fair and should be paid promptly. In the case of foreign investment there should not be any restrictions on the remittance of profits and the ultimate repatriation of capital. It should be remembered that it takes long to create business confidence; yet one reckless act can shatter it overnight.

**Industrial Investment Schedule:** In November, 1960, the Government of Pakistan announced an Industrial Investment Schedule for the private sector for the entire Second Five-Year Plan Period (1960-65). This was one of the major contributions of the author to industrial development in Pakistan. For the first and last time in the history of Pakistan the Central Government divested itself of the patronage involved in sanctioning industries. This was done because it was felt that government should concern itself with the establishment of industry and not with the person who received the sanction.

The financing agencies (PICIC and IDBP, and in cases involving foreign investment the IPB) were authorised to sanction industries within the limits laid down by the Industrial Investment Schedule. Any sanctions issued outside the Schedule required prior clearance of government. Sanctions were to be given strictly on a "first come first served" basis. Separate provisions were made for new capacity and for balancing and modernisation of existing capacity. No sanction was necessary for setting up industries based on locally fabricated equipment and where a demand was not made for imported raw material and spare parts. The requirements of the sanctioned units for importing raw material and spare parts were fully met. Interference by government in the affairs of the private sector was kept minimal.

The buoyancy shown by private enterprise fully reflected the effectiveness of the Industrial Investment Schedule, both the first and the revised. The first Investment Schedule, containing 107 items and covering an investment of Rs. 2,844 million which included provision for development of hotels, minerals and power, was announced in November, 1960, for the whole of the Second Plan period. In addition, a Schedule amounting to Rs. 180 million was also issued for small industries. The response, however, was so great that within two and a half years of the plan period, against 107 items, 69 were either fully committed or over-utilised which resulted in revision of the original Schedule.

The revised Schedule announced in February, 1963 provided for a total investment of Rs. 1,528 million. The sanctions issued for industries during the Second Plan period amounted to Rs. 7,547.6 million, against which the utilization was of the order of Rs. 4,624.6 million thereby exceeding the Plan target of Rs. 3,660 million by about 26.4%.

During the Third Plan period (1965-70) the Ministry of Industries and the Investment Promotion Bureau reasserted their authority and governmental clearance for all industrial sanctions again became the general rule. The Planning Commission has attributed the shortfall in industry to extraneous factors which did not reflect the potential of the sector. These extraneous factors were: delays and difficulties in the formulation and publication of the Industrial Investment Schedule; and long delays in sanctioning industries under the Schedule even after its publication. Bureaucracy had once again reasserted its grip on the pulse of private industry. Since then the position with regard to sanctioning industrial projects in the private sector has hardly improved. In any case the loss of confidence is so acute that an improvement in sanctioning procedures would hardly matter much.

**Financing of Industry:** Capital shortage is a characteristic phenomenon in under-developed countries, sometimes relative in the sense that labour and land could be made more productive if more capital were available, sometimes absolute in the sense that the supply of capital is insufficient to employ the population fully even in the least capital-intensive activities. The capital requirements of the manufacturing industry tends to be much larger per unit of operation than those of the existing agricultural and commercial activities of most of the under-developed countries. Moreover, because of the higher cost of acquiring and installing plant and equipment, and the need to provide various ancillary services normally available for purchase in an industrial environment, as well as to carry larger stocks of stores and raw materials, tend to be larger than the corresponding requirements of a comparable unit in a more industrialized country. This magnifies the relative shortage of domestic capital and also helps to explain the tendency for the local entrepreneur to under-estimate the capital needed for a given industrial enterprise, thus putting himself in the awkward position of having to seek more funds long before his factory has become firmly established. As second calls on the capital market seldom meet with a favourable response, especially in an economy in which capital supplies are scarce and appropriate institutions lacking, such under-estimation is a frequent cause of business failure. And every industrial failure tends to confirm the reluctance of local investors to tie up their funds in manufacturing establishments and reduces the relative attractiveness of manufacturing as a field of local investment, thereby increasing the shortage of capital to other would-be industrial entrepreneurs.

**Thus the most serious barrier to the establishment of more private industrial plants is lack of long-term financing.**

While most LDCs have fairly well-developed facilities for meeting the short-term credit requirements of trade, many do not have institutions for the provision of medium-and long-term credits for industrial development. The absence of organized establishments for industrial financing is partly due to a shortage of capital, but even more to a failure to develop an industrial type of capital market. The frequent impossibility of obtaining long-term loans is a serious limitation on both the size and number of industrial projects which will be undertaken in many countries.

The potential investor needs this kind of financing for various reasons. He wants to limit the amount of his own funds that he risks in a particular project. He likes to cover part of the cost of the project with a fixed-interest type of financing so that the rate of profit on his equity capital can be increased. He may also need to have financing simply in order to undertake a project of suitable economic size which he cannot finance entirely from equity sources. Most

LDCs have now established industrial financing institutions to meet the foreign exchange and local currency requirements of industrial projects.

In Pakistan the IDBP and PICIC have been very prominent in promoting industry in the private sector. These banks secure foreign exchange resources from international institutions such as the World Bank, Asian Development Bank, and the Export Import Banks of the U.S.A., Japan and Germany, as also lines of credit obtained from government which in turn obtains them from friendly countries. Institutions like the International Finance Corporation also extend credits directly to the industries. Medium-term industrial credit for meeting foreign exchange requirements is also available through suppliers' credits. But shortage of funds, both local and external, continues to be the most serious obstacle to industrial development.

**Location of industry:** The location of industry is important both from the point of view of the industry itself as also from the point of view of the economy as a whole. The concentration of industry is natural owing to the prevalence of external economies; its dispersal needs a conscientious efforts on the part of government. Industries tend to be located near the source of raw materials, including water, power and gas; in the proximity of markets for the sale of the end product; in areas where the supply of labour is adequate; where the economic and social infrastructure is well developed—this is particularly true of transport and communications facilities has also banking facilities; where there are adequate arrangements for repair and maintenance; and where facilities exist for civilised entertainment. Then there is the important matter of "climate" which includes such intangible as the community attitude towards industry, the political and law and order situation, the quality of local government and extent of local taxes, school and hospital facilities, the attractiveness of the area as a place to live, and the attitude of labour. These factors are more important in the LDCs than in the developed countries, for in the former the attitudes, customs and facilities which provide the good climate for new industry have yet to be developed.

Concentration of industry accentuates the prevailing regional disparities in any country, and much more so in an under-developed country. The situation can assume serious political dimensions in a country whose government has a federal structure. In Pakistan the government is attempting to disperse industry into the poorer parts of the country. It can do so in the case of public sector industries without seriously damaging their economy. In the case of the private sector restrictions have been placed on transferring the location of an industrial unit without the prior approval of the sanctioning agency and the provincial government affected. This has been done to prevent the practice of people obtaining sanctions on a priority basis with the intention of locating the projects in a relatively backward area, and thereafter shifting the location to better site in a developed area once they have the sanction in their pocket. Government also attempts to influence the location of industry by establishing industrial estates. These institutions not only provide land at a reasonable price in a well-planned site but they also make arrangements for the provision of water, gas and electricity. As the industrial estate develops, the industries located there start enjoying external economies and they are no longer at a competitive disadvantage with other industries located in the older sites.

## **Role of Small and Cottage Industries**

The distinction between small and cottage industries is very real while that between small and large-scale industry is rational.

Small industries differ from large-scale industries only in size. Like their bigger brothers they employ paid labour and their products enter the market economy; they are also mainly located in the urban centres and their presence in villages is the exception rather than the general rule. In Pakistan small industries are defined as industries which employ manual labour but do not use any motive power, or industries which use motive power and fixed assets (other than land) valued at not more than one million rupees. In the light of inflation the limit of one million rupees could well be raised to 2.25 million rupees.

In India small industries are defined as those which have a capital investment of less than Rs. 5,00,000 and employ less than 50 persons when using power and less than 100 persons



when not using power. Small industries are not really family-based enterprises using traditional production techniques. Most of them utilise mechanised techniques to manufacture quality goods for national as well as international markets. The concept of small industry has so widened that in current thinking it only excludes the large-scale industry. Small industry provides a balance to the industrial sector, coming at it does between the industrial giants and the cottage crafts.

Cottage industry or the handicrafts are basically household enterprises and do not generally employ hired labour. They are mostly concentrated in the rural areas, small urban communities, or in the poorer sections of the large urban centres. Not only do cottage industries differ from small industries in the matter of their location, but also in the method of production and the nature of output. Of all the cottage industries the most popular and the most celebrated is the handloom industry. The self-employment aspect of cottage industry has a great appeal and some give it the status of being an important basis of self-government. The ancient crafts have been eulogised in folklore and they are regarded as being symbolic of the culture and organic unity of the village communities. The enthusiastic support for handicrafts of the cottage industry comes primarily from romantics who would at least partially preserve the old and honoured way of rural life and save it from the excesses of urbanisation and all that goes with it. A more pragmatic consideration for enthusiastically supporting the growth of cottage industries would be the decentralisation of industry and its dispersal in the rural areas.

The problems faced by small industries and cottage industries are somewhat similar, although in the case of the latter's growth these problems assume serious dimension. A satisfactory solution of these problems can give a great boost to industrial production in these sectors. Broadly speaking, the main problems are:—

- (i) Availability of local and imported raw material at the right time and at a reasonable price would be critical to their existence.
- (ii) Availability of marketing arrangements to sell the finished products at a price which allows a fair margin of profit is another critical factor in the promotion of small and cottage industries.
- (iii) Availability of credit facilities during the production process is also important.
- (iv) Assistance in standardisation of production, and improving the quality of production, and suggesting new designs and specifications to accord with market preferences would go a long way in popularising their products, both nationally and internationally.
- (v) Provision of power facilities in the villages would be a boon to the rural craft.

Apart from the intrinsic worth of their contribution and their relatively lower capital requirements to production, the main justification for actively encouraging the growth of small and cottage industries lies in their providing additional and substantial employment opportunities. This would necessitate that there should be a concerted drive to locate more and more small industries in the small urban centres near the villages, and wherever possible in the villages. This should supplement the cottage industries in the villages as a means of providing additional employment opportunities. The scope of cottage industry to absorb rural labour would, in the ultimate analysis, be limited by the absorption of their product in the national (primarily urban) and international markets. The scope for creating additional demand in the villages is rather limited, although this too would increase with the development of the village sector. A lot would also depend on the quality of cottage industry products and their standardisation. Small industries are relatively better placed to absorb additional labour, for in their case modern production techniques (with emphasis on the labour-intensive types) can be readily employed. There could be well-coordinated development of large-scale and small industries in order to bring about a complementary relationship. Components and parts, and servicing and maintenance can be contracted out by the larger units to smaller ones, while the latter could secure their raw materials and equipments from the larger ones. Vertical integration of a large industry would have to be avoided, as far as practicable. The modernisation of small industry is necessary if it is to stand on its own legs; cottage industries would also have to be induced to change over to modern techniques. Increased, standardised and low cost production would, in its own

right, command much bigger markets. Meanwhile governments will have to provide protection in some form or the other not only from imports but also from the products of large-scale industry. Import contracts do not present any great difficulty but protection from the bigger brother is more difficult to plan, let alone implement. Establishing non-competing spheres of production is easier said than done.

While lip-service is paid to protecting the cause of cottage industry the extent of practical measures taken in this direction does not amount to much. Perhaps the best practical way of assisting cottage industries is to provide them with simple machines, improved tools, improve their availability of raw material and their marketing, and provide them with an element of direct or indirect subsidy.

India is one country amongst the under-developed countries which has taken firm and active measures to promote small and cottage industry. Its policy has paid rich dividends in so far as the exports of their products is concerned. The cottage industry movement was given pride of place in the Indian independence movement led by Gandhi. Gandhi's Swadeshi (preference for the products of one's own country) movement was a way of life, and he himself defined it as "the spirit in us which restricts us to the use and service of our immediate surroundings to the exclusion of the more remote." Clothes made from the handloom (khadi) became the symbol of the struggle for independence, and people of all classes from amongst the Hindus, dressed in their khadi shirts, flocked around Gandhi who wore no shirt at all. Somebody has aptly remarked that of all the non-violent weapons forged by Gandhi, khadi was the nearest moral equivalent of an infantryman's rifle. Gandhi could really wax eloquent when he thought in terms of the Charkha (spinning wheel) which he elevated to the status of a moral principle.

"The charkha (the traditional spinning wheel) supplemented the agriculture of the villagers and gave it dignity. It was the friend and solace of the widow. It kept the villagers from idleness. For the charkha included all the anterior and posterior industries—ginning, carding, warping, sizing, dyeing and weaving. These, in their turn, kept the village carpenter and the blacksmith busy. The charkha enabled the 700,000 villages to become self-contained. With the exit of the charkha went the other village industries, such as the oil press.... Hence, if the villagers are to come into their own, the most natural thing that suggests itself is the revival of the charkha and all it means."

Gandhi was all for the renewal and self-sufficiency of the village to the extent that he opposed the introduction of machinery in industry and looked with disdain on the introduction of higher technologies in rural enterprises:

"Mechanization is good when hands are too few for the work intended to be accomplished. It is an evil where there are more hands than required for the work as is the case in India. The problem with us is not to find leisure for the teeming millions inhabiting our country. The problem is how to utilize their idle hours which are equal to the working days of six months in the year. Dead machinery must not be pitted against the millions of living machines represented by the villagers scattered in the 700,000 villages of India."

The Gandhian emphasis on cottage industry has been elaborated because it provides one extreme of the craft philosophy and also because of its tremendous impact on Indian thinking. Antagonism to the machine made Gandhi anti-capitalistic, while his passion for an economic brotherhood made him pro-socialistic. The confusion in India calling for a socialistic economic pattern is basically a Gandhian legacy.

While cottage industry has hardly enjoyed any worthwhile support in Pakistan, small industry has fared well. Yet small industry has not so far percolated to the villages. During 1970—75 investment in small industry amounted to 1,672 million rupees of which just 80 million rupees was in the public sector. Private investment in small industry was 43% of private investment in large-scale industry, and total investment in small industry was 21% of total investment in industry as a whole. The growth in production in small industry is indicated in Table 22.3.

TABLE 22.3

*Production of Small Industry*

	1959-60	1964-65	1969-70	1972-73	1973-74	1974-75
(a) Production of small industry in million rupees	859	1,055	1,496	2,066	2,604	3,555
(b) (a) as % of production of large-scale industry	74.1	39	27.6	28.4	27.2	27.2

Source: Statistics Division.

The share of the production of small industries in total industrial production has been declining over the years. Apparently economies of scale are a dominant influence on the scale of industrial production, or sufficient attention is not being given to the promotion of small industry.

Government financed promotional activities for small industries fall in two broad categories:

- (i) technical and management services, and
- (ii) commercial services.

Technical and management services are provided along the following lines:

- (i) Small Industries Service centres for selected industries provide advisory service and demonstrations on technical processes and use and improvement of equipment, training in business management, research in use of indigenous materials, and surveys of industrial prospects.
- (ii) Small industries extension services serve areas where such industries are or can be concentrated; mobile extension services serve remote areas.
- (iii) Pilot Projects are set up to demonstrate the possibilities of new industries on an experimental basis.
- (iv) A design centre undertakes research on industrial design and handicrafts collaborating closely with existing arts and crafts institutions.

Commercial services perform the following functions:

- (i) Production facilities, including common facilities centres and mobile common facilities units and small industrial estates.
- (ii) Supply and marketing services, including sales and display centres to market small industries products and display modern designs, patterns and suitable equipment; grading and inspection to ensure standardized quality of products; and supply of material and equipment, especially imported supplies which will be sold to small industries by the Small Industries Corporations to the extent necessary.
- (iii) Credit services including loans for modernization and extension and credit for purchase of raw materials and for marketing. The cooperation of existing financial institutions will be enlisted, but direct credit in kind (raw materials or pre-payments of products to be marketed) and to a more limited extent, to finance equipment on a hire-purchase basis, will also be provided by the Small Industries Corporation.

### Ownership of Industry

In practically all the developing countries there is a general awareness of industrial growth as a means to achieve the objective of maximisation of the economic and social welfare of their people. Almost all the countries have plans under way for their industrial development. While planning for a rapid rate of industrial growth, they have to face a question of vital importance; whether it is through public enterprise, or through private enterprise, guided and encouraged by government policies that a rapid rate of economic growth can be achieved.

The decision on the alternative choices or a blending of the two is largely conditioned by the political philosophy that a country is following. In countries having socialism as a na-

tional objective the public sector is utilized to the maximum extent whereas a country stressing the market economy makes the maximum use of private enterprise in achieving its national objectives and entrusts to the public sector only such functions which the private sector is unable to perform or which are essential and of strategic importance.

It has been argued that rapid expansion of the public sector would materially contribute to increasing public savings for investment, thereby making it possible to increase the rate of growth. The particular advantage of the expansion of the public sector from this point of view is that a possible conflict between efficiency and distribution of income is, to a large extent, eliminated. Increased profits which in the private sector would create inequalities and possible conspicuous and wasteful consumption can, in the public sector, be directed towards capital formation. By efficient operation and following a rational and economically sound price policy a public enterprise can secure adequate returns on capital employed and contribute its full share in increasing the portion of national resources devoted to investment.

The basic point put forward in favour of public enterprise is the fact that the profits which accrue do not belong to an individual or a group of individuals as in a corporate private business. Also the private sector, particularly if it is of a monopolistic nature, has to be controlled by regulations but in the public sector the pattern can be controlled in a positive way. Another weakness of private enterprise is the follow-the-leader principle under which one profitable plant in an industry is followed by others until soon there is insufficient market for anyone. Another failing of private industry is the tendency of some industrialists to operate in an anti-social way by evading taxes, cheating their shareholders and assuming no responsibility for community development. Even ignoring these failings in some industrialists the fact remains that certain basic industries requiring large investments and which could be undertaken only on the assurance of future prospects, with no immediate gain in sight, would not normally be started if reliance was to be placed entirely on private enterprise. Moreover, by organising big industries which require large investment in the public sector, undue concentration of economic and industrial power in private hands can be prevented.

Public enterprise seems to have certain advantages in achieving a rapid rate of economic growth. The question, however, arises whether a high rate of growth can be attained by encouraging and guiding private enterprise through incentives and fiscal and other policies without taking recourse to public enterprise. It is possible that through incentives and fiscal and other policies government can guide the private enterprise into desirable channels. This will ensure a high rate of growth and maximum freedom to the private enterprise. The argument that in the development of private enterprise only a few individuals or a group of individuals would benefit does not hold good in the present private enterprise system. The present pattern of development of a free society is that individual proprietorship, partnership and private limited companies are being increasingly replaced by public limited companies wherein any member of the society can participate and share the benefits. Moreover, the accumulation of wealth in a few hands can be discouraged through fiscal and other policies, thereby reducing the economic disparity in various groups of the people. The current high and progressive rates of Wealth Tax, Gift Tax, Estate Duty, and Capital Gains Tax, Income-Tax and Corporate Tax are cases in point.

In recent years the wisdom of developing public enterprise and making it the chief source of achieving national objectives has been criticised even in countries that are following a socialistic pattern. The experience gained in these countries indicates that public enterprise has not been as efficient as private enterprise, and that if the facilities available to public enterprise had been accorded to private sector, the development would have been far greater.

There are certain distinct advantages in the private sector which make it more efficient than public enterprise. Private enterprise is generally more conscious profits and costs and is more flexible in operation than the public sector. Private business tends to gain most by seeking the utmost in efficiency, which is just another way of ensuring low-cost production, or maximum output for a given amount of input. The purpose of manufacturing is to gain the economic advantage accruing from the difference between what a product can sell for and what it costs to produce. One of its most fundamental advantages is that it has one single clear purpose--

to maximize its profitability. One of their operational means to achieve that purpose is to keep costs down; they are not trying to win the favour of groups of voters, such as employees and raw material suppliers at the same time.

Secondly, another means is to employ as few people as possible; they are not simultaneously trying to solve the unemployment problem in the electoral district where they operate. Private industry not only has the advantage of unity of purpose, it has the advantage that its purpose is economic and nobody seriously expects it to look at questions from any other viewpoint. While government enterprises are under continual pressure to make policy decisions on non-economic grounds, such as pleasing voters' groups, private firms are singularly free to make their decisions on purely economic grounds. They buy their raw materials, supplies, and labour at the best available competitive prices, and nobody is surprised that they do so. Because they look at every issue from a viewpoint of cost, the special-interest groups, such as the workers in the plant and the raw-material suppliers, are not likely to benefit as handsomely as they would in dealing with a government enterprise. But the economy as a whole does have the potential gain of securing the output with less economic input.

Public enterprise is more susceptible to red tape and official interference and pressure than private enterprise which is primarily guided by business motives. The professional executive class has still a long way to develop in countries such as Pakistan. Even in the industrialised countries of the West pecuniary benefits, such as share options and profit-sharing by way of bonuses, have to be provided to the business executive class to give them the private enterprise flavour.

Up to 1971 Pakistan's approach had been a pragmatic one viewing with favour a mixed economy stressing the private sector. The only industries reserved for state ownership and state management were the manufacture of arms and ammunition and production of atomic energy, railways, power, air transport and telecommunications. In the public sector, by and large only such industries were promoted which the private sector was either unable or unwilling to undertake. The public sector supplemented rather than supplanted private enterprise. The Pakistan Industrial Development Corporation combined Government initiative and finance with private enterprise and so did Wah Industries. Industrial Development Corporations disinvested in favour of the private sector as and when suitable opportunities arose.

The PIDC played a leading role in the industrial development of the country not only by setting up a large number of industries but also by associating private enterprise as far as possible. Up to June 1962 the Pakistan Industrial Development Corporation undertook the establishment of 55 projects, either on its own account or in partnership with private enterprise, at a total cost of Rs. 1720 million.

With the decentralisation of administration under the 1962 Constitution the PIDC was bifurcated into two provincial organisations. Up to 1970 the PIDC completed 48 projects involving an approximate cost of 1,000 million rupees in the present boundaries of Pakistan. The completed projects covered a wide range of industries like fertilisers, natural gas, shipyards, sugar, cement, carpets, and woollen textiles, chemicals and pharmaceuticals, paper and board, timber seasoning, jute manufactures, and mining interests in coal, salt, limestone, gypsum and brine.

In January 1972 Prime Minister (then President) Bhutto's government announced Industrial Reforms under the Economic Reforms Order of 1972. Government took over 32 industrial units under 10 basic categories: iron and steel, base metals, heavy engineering, heavy electrical, assembly and manufacture of motor vehicles, assembly and manufacture of tractor plants, heavy and basic chemicals, petro-chemicals, cement, and public utilities (electric generator, and transmission and distribution of oil and gas). Companies which involved foreign investment, even if they came under any of these categories, were not touched. In September 1973, all vegetable ghee units were nationalised with the exception of those having foreign participation. Majority ownership in public limited companies and the entire equity of private limited companies have been acquired. Compensation is being paid at the market value instead of the break-up value as originally envisaged. Up to March 1975 the value of entitlement certificates lodged with the Board of Industrial Management amounted to Rs. 116 million against which compensation (mostly in the shape of bonds) of Rs. 81.9 million had been paid.

Production Minister Rafi Raza has successfully managed to put a semblance of order into the nationalised industries within a relatively short period. The management of vegetable ghee units has been entrusted to the provincial governments. A Board of Industrial Management (BIM) has been constituted to administer the nationalised industries and the old public sector industries, which have been organised into 12 functional corporations (including PIDC). Each of these corporations is responsible for the development and administration of the related industrial units as follows:—

## LIST OF OPERATING COMPANIES

### *I. Federal Chemical and Ceramics Corporation Ltd.*

1. Antibiotics (Private) Ltd.
2. DDT Factory, Nowshera.
3. Ittehad Chemicals.
4. Ittehad Pesticides Ltd.
5. Khurram Chemicals Company Ltd.
6. Pak-Dyes and Chemicals Ltd.
7. Pakistan PVC Ltd.
8. Ravi Engineering Ltd.
9. Ravi Rayon Ltd.
10. Sind Alkalies Ltd.
11. Swat Elutriation Plant.
12. Synthetic Chemicals Company Ltd.
13. Wah Pharma Chemicals Ltd.

### *II. Federal Light Engineering Corporation Ltd.*

1. Karachi Pipe Mills Ltd.
2. Lahore Engineering and Foundry Ltd.
3. Metropolitan Steel Corporation Ltd.
4. Northern Foundry and Engineering Works Ltd.
5. Nowshera Engineering Company Ltd.
6. Pakistan Engineering Co. Ltd.
7. Pioneer Steel Mills Ltd.
8. Quality Steel Works Ltd.

### *III. National Design and Industrial Services Corporation Ltd.*

### *IV. National Fertilizer Corporation of Pakistan Ltd.*

1. Lyallpur Chemicals and Fertilizers Ltd., Jaranwala.
2. Lyallpur Chemicals and Fertilizers Ltd., Lyallpur.
3. Natural Gas Fertilizer Factory.
4. Pak-American Fertilizer Ltd.

### *V. Pakistan Automobile Corporation Ltd.*

1. Awami Autos Ltd.
2. Bela Engineers Ltd.
3. Domestic Appliances Ltd.
4. Millat Tractors Ltd.
5. National Motors Ltd.
6. Naya Daur Motors Ltd.
7. Pakistan Tractors Corporation Ltd.
8. Republic Motors Ltd.

9. Sind Engineering Ltd.
10. Trailer Development Corporation Ltd.

*VI. Pakistan Industrial Development Corporation*

1. Bannu Sugar Mills.
2. Harnai Woollen Mills Ltd.
3. Indus Gas Company Ltd.
4. Karachi Gas Company Ltd.
5. Larkana Sugar Mills Ltd.
6. Quaidabad Woollen Mills Ltd.
7. Talpur Textile Mills.

*VII. Pakistan Steel Mills Corporation Ltd.*

*VIII. Estate Cement Corporation of Pakistan Ltd.*

1. Associated Cement.
2. Gharibwal Cement Ltd.
3. Javedan Cement Ltd.
4. Maple Leaf Cement Factory Ltd.
5. Mustehkam Cement Ltd.
6. National Cement Industries Ltd.
7. White Cement Industries Ltd.
8. Zeal Pak Cement Factory Ltd.

*IX. State Heavy Engineering and Machine Tool Corporation Ltd.*

1. Heavy Mechanical Complex.
2. Pakistan Machine Tool Factory.

*X. State Petroleum Refining and Petrochemicals Corporation Ltd.*

1. National Refinery Ltd.
2. Enar Petrotech Services Ltd.

*XI. State Electrical Corporation of Pakistan Ltd.*

*XII. Mineral Development Corporation*

The annual BIM review for 1974-75 provides encouraging reading. In 1973-74 production increased by 31.4% above the 1972-73 level and in 1974-75 it increased by 21.8% over the previous year's level. Sales increased from Rs. 2935.8 million in 1973-74 to Rs. 4838.1 million in 1974-75 (an increase of 64.8%); the increase in sales is partly due to increased physical sales but mostly due to price increases. This is also borne out by the increase in BIM pre-tax profits from Rs. 174.8 million in 1973-74 to Rs. 254.5 million in 1974-75, an increase of 45.6%. Public complaints regarding cement shortage have become pretty widespread; in fact most BIM products are in short supply. The BIM operations are subject to some serious criticisms:

- (i) The Corporations and their affiliates do not enjoy the autonomy which is their right as a business organisation and without which they cannot function effectively. The nationalised industries are literally run from Islamabad and are in effect adjuncts of the Ministry of Production.
- (ii) In quite a few cases BIM Corporations purchase their inputs for political considerations.
- (iii) The distribution of BIM products has a strong political bias and there is little respect

- for the "first-come-first-served" principle.
- (iv) There is little consideration shown to the poor consumer in fixing the retail prices. This is a classic example of monopolistic exploitation.
- (v) The BIM units are over-staffed and scant attention is paid to increasing productivity and lowering the cost of production.

The public sector in Pakistan is expanding at a tremendous rate although it has a long way to go before it can catch up with the private sector, even though it is now investing heavily in steel, engineering, chemicals, fertilisers, cement and the oil refinery. During 1974-75, the industrial production of the public sector was Rs. 4838.1 million, 29.1 % of total industrial production. During 1970-75 industrial investment in the public sector was Rs. 2,546 million, 40.7 % of total industrial investment. Comparative percentages for 1960-65 and 1965-70 were 7 % and 15.6 % respectively. During 1975-80 public sector industrial investment is expected to rise to Rs. 23,500 million, that is 67.1 % of total industrial investment. In Prime Minister Bhutto's government the public sector is coming into its own.

Discussion on the ownership of industry must cover the question of foreign investment. If foreign investment in the industrial sector is very high then it will make excessive demands on foreign exchange resources for remittance of dividends, fees, royalties and repatriation of equity (when the investment is sold to local parties). Foreign investment needs a really good investment climate with appropriate assurances regarding remittances of profits, repatriation of capital, and safeguards against nationalisation. The costs of foreign investment needs to be weighed carefully against its benefits. Foreign investment should never be encouraged in simple and unsophisticated, yet profitable industries. When the oil producers of the Third World are moving towards a complete nationalisation of an involved and complex industry like oil, countries such as Pakistan should not be inviting foreign participation in industries like cement and textiles in which there is no shortage of indigenous know-how.

The foreign investment policy of Pakistan is recapitulated as follows:—

A. The Government recognizes that foreign investment can play a significant role in promoting economic development of under-developed countries where capital formation is generally slow, technical know-how limited and trained personnel not always available. In Pakistan, there are a number of industries, including those mentioned below, where Government will seek to attract foreign investment:—

- (i) Heavy Engineering.
- (ii) Heavy Chemicals.
- (iii) Production of synthetic distillation of coal and gas.
- (iv) Pharmaceuticals.
- (v) Antibiotics.
- (vi) Mining, Beneficiating, Concentrating, Refining and Processing of all minerals including oil.
- (vii) Manufacturing of Producer Goods and spare parts.

B. The following safeguards, concessions and conditions will be extended and applied to foreign investment in Industries:—

- (i) There will be no restriction on the remittance of current profits to the country from where investment originated.
- (ii) Foreign capital in approved industries established after 1st September, 1954, may be repatriated at any time to the extent of original investment. Any appreciation of capital investment ploughed back into approved industrial undertaking may be treated as investment for the purpose of repatriation.
- (iii) There will be no rigidity about the participation of Pakistani capital in any industry where foreign investment is approved by the Government. Normally the Government, will expect that the required local expenditure will be met from local equity capital. In the case of oil refining, the Government will expect substantial participation of Pakistani capital in equity.



In foreign undertakings, progressive employment and training facilities for Pakistani nationals will be necessary.

- (iv) The Government has no intention of nationalizing industries involving foreign investment. Should circumstances or an emergency necessitate nationalization, just and fair compensation will be paid in the currency of the country from where the foreign investment originated.
- (v) Relief from double taxation will be available for foreign investors from countries with which Pakistan has an agreement on double taxation relief, such as the U.S.A., the U.K., West Germany, Japan and India. Similar agreements with other countries are under consideration.
- (vi) Foreign technicians employed in an industrial undertaking under a contract approved by the Central Government are and will be entitled to income-tax relief.

## Minerals

The economic development of Pakistan would have been accelerated with far less sacrifice if there had been a measure adequate power mineral resources. The terrain and topography of the country and recent geological surveys and mineral investigations indicate that there are good prospects of discovering substantial mineral resources. Yet mineral production in Pakistan accounts for only around 1% of GNP. Despite all the lip-service given to mineral development by all governments, whenever it came to implementation there was an unholy combination of shortage of resources, inaccessibility of some potentially rich areas, shortage of railway wagons, fragmentation of leases, non-availability of trained and qualified personnel, inadequate mining and laboratory equipment, poor organisational structure, and a complete absence of the spirit of adventure and risk-taking which are inherent in any worthwhile scheme of mineral development.

The mineral occurrences in Pakistan could be divided into three main categories:

- (i) Minerals showing which are either in the form of small deposits of little value or are so limited in quantity that they have no economic significance. Some of these small deposits like antimony ore, arsenic ore, asbestos, emery stone, feldspar, fluorite, graphite, mica and quartz have a limited local economic value and could be used on a cottage industry basis.
- (ii) Mineral deposits for which there are good projects for exploitation on a commercial scale but which are presently being extracted on a limited scale are indicated in Table 22.4.

TABLE 22.4

*Pakistan's Reserves of Minerals with Goods Prospect for Exploitation*

S. No.	Mineral	Locality	Reserve (in Tons)	Production Potentials (in Tons/year)	Remarks
1.	Abrasive	Dir and Swat Districts, NWFP, Gilgit Agency.	Not estimated	Not determined	Garnetiferous schists in northern areas and residue from the wash of Indus Sand may provide substantial quantity.
2.	Baryte	Kalat and Las Bela districts, Baluchistan, Hazara district, N.W.F.P.	1,322,500 to 2,000,000	More than 3,000	Occurrence at Lasbela is insignificant.
3.	Bauxite/Laterite	Muzaffarabad and Mirpur Districts, Azad Kashmir, Chitral & Hazara Distt. NWFP, Dadu, Thatta and Tharparkar Distt., Sind; Mianwali, Campbellpur & Sargodha Districts, Punjab; Kalat and Sibi Districts, Baluchistan.	Well over 19,00,000	More than 500	The deposits are only used in cement and other industries. Further investigation may prove metallurgical grade deposits.
4.	Bentonite	Mirpur District, Azad Kashmir, Dadu and Khairpur Districts, Sind; Peshawar District, NWFP; Jhelum, Rawalpindi and Sargodha Districts, Punjab.	Over 99,000	Up to 1200	

5.	Beryl	Gilgit Agency, Dir and Chitral Districts, NWFP.	Not estimated	Not determined	The deposits of aquamarine in Skardu and beryl in Dir need further exploration which could prove a sizable deposit.
6.	Celestite	Dadu District, Sind; Mianwali District, Punjab.	Over 230,000	650	Mianwali deposits have not been fully explored.
7.	China clay	Tharparkar District, Sind; Hazara, Dir & Swat Districts, N.W.F.P.	Over 698,000	1074	Deposits of Dir, Tharparkar and Hazara require further exploration; Swat deposit would be utilized by Ceramic complex, Nowshera.
8.	Copper	North Waziristan Agency, Chitral, Dir, Hazara Districts; NWFP; Chagai, Loralai, Quetta, Pishin, Zhob Distt., Baluchistan; Sargodha and Mianwali, Punjab.	Not estimated	Not determined	The occurrences have not been fully explored and are estimated to provide substantial reserves.
9.	Dolomite	Mianwali, Sargodha, and Rawalpindi Districts, Punjab; Hazara District, NWFP; Thatta District, Sind.	Very large deposits	1400	Kutki and Zaluch deposits (Mianwali district) and Jhimpir deposits (Thatta district) would be utilized by Karachi Steel Mill.
10.	Gemstone	Chitral and Mardan Districts, Mohmand Agency and Swat District, Hazara & Dir Districts, Zhob district.		Not determined	Exploration of Topaz deposits of Chitral & Mardan Districts; & Ruby/Spinel deposits of Hunza and Dir Districts may prove a sizable deposit.
11.	Iron Ore	Mianwali and D.G. Khan Districts, Punjab, Hazara, Chitral and D.I. Khan Districts, N.W.F.P., Kalat and Chagai Districts, Baluchistan.	Over 446,100,000	Not being exploited	Exploration and metallurgical studies of these deposits should be continued, so as to meet Steel Mill's requirement if possible.
12.	Magnesite	Kalat and Zhob Districts, Baluchistan, Hazara District, NWFP.	Upto 12,000,000	2,162	Development of Hazara Magnesite deposits is required for the production of 45,000 tons per annum.
13.	Phosphate	Campbellpur District, Punjab; Hazara and Attock areas, NWFP, Tharparkar Distt., Sind.	Over 2,500,000	Not being exploited	Exploration and development of Hazara phosphate deposits to meet domestic requirements.
14.	Soapstone/ talc.	Hazara and Swat Districts, Khyber and Parachinar Agency, NWFP.	Over 600,000	8,262	Detailed exploration and development of Swat deposit for proving more reserves to meet the domestic and export requirements.
15.	Sulphur	Chagai and Sibi Districts, Baluchistan, Reshian, Azad Kashmir.	800,000	3,310	Development on scientific lines is required for optimum production for defence and other purposes.
16.	Gold	Gilgit and Baltistan Agency	Not estimated	Not determined	Placer Gold in the alluvial talus and sand of River Indus may prove an economical deposit.

Source : Geological Survey of Pakistan.

- (iii) The third and most important category comprises minerals which occur in large quantities and are also being substantially exploited. Table 22.5 indicates their reserves production in 1974-75, estimated production in 1979-80, and their location.

TABLE 22.5  
Position of Minerals with Large Reserves in Pakistan

Sl. No.	Name of Mineral	Reserves	Production in 1974-75	Estimated Production in 1979-80	Location
1.	Aggregate and building stone	Very large deposits			
2.	Chromite	Fairly large deposits	20,000 tons	Can be increased in accordance with demand	Muslim Bagh in Zhob, Bunap and Rayo valley in Chagai, Malakand, Mohmand and North Waziristan.
3.	Coal	442 million tons	1.6 million tons	3.3 million tons	Khost Sharigh, Sor Range, Degari and Mach in Baluchistan; Mahermal and Salt range in Punjab;

					Larkana, Meting and Jhimpir in Sind; Dera Adam Khel and Cherat in NWFP and Muzaffarabad in Azad Kashmir.
4.	Crude Oil	40 million barrels (excluding Tut oilfield)	0.32 million tons or 240,000 barrels	730,000	Potwar region of Punjab
5.	Fire Clay	Over 100 million tons	35,000 tons		Mianwali, Sargodha, Campbellpur, Thatta, Dadu and D.I. Khan.
6.	Fuller's Earth	Fairly large	15,000 tons	Increase in demand on account of expansion of oil, insecticides, foundries and steel industries will be met.	Thana Bula Khan in Dadu and Shadi Shahid in Khairpur.
7.	Gypsum/ Anyhdrite	Very large deposits	303,000 tons	Increase in local and export demand will be met; local demand about 600,000 tons	Mianwali, Jhelum, D.G. Khan and Kohat, smaller deposits in Bahawalpur, Dadu, Sanghar, D.I. Khan and Sibi.
8.	Limestone	Very large deposits	6 million tons	Increase in demand mainly from cement industry will be met.	Widespread all over the country.
9.	Marble/ Aragonite	Very large deposits	21,000 tons of which 50% was exported		Khyber Agency and Mardan.
10.	Natural Gas	16.8 million cu. ft. or 13.3 million cu. ft. of Sui quality gas	400 million cu. ft. per day	750 million cu. ft. per day	Sui, Mari, Khandkot, Mazarani, Sari, Hundi and Dhulian.
11.	Rock Salt	Very large deposits	450,000 tons	600,000 tons	Mianwali, Jhelum, Sargodha, Kohat.
12.	Sea Salt	Very large deposits	230,000 tons	230,000 tons	Karachi.
13.	Silica Sand	Very large deposits	44,625 tons	60,000 tons	Dadu and Mianwali.
14.	Radioactive Minerals	Sufficient for Pakistan's requirements	Not available	Not available	D.G. Khan and various other localities.
15.	Bauxite	Over 19 million tons	—	—	Ziarat, Azad Kashmir, Chitral, Hazara, Dadu, Thatta and Sargodha
16.	Phosphate	2.5 million tons of rock phosphate containing upto 35% P <sub>2</sub> O <sub>5</sub>	35,000 tons	260,000 tons	Near Abbottabad.
17.	China Clay	613,000 tons	1,074 tons	30,000 tons	Shah Derai, Nagarparkar, Dir and Hazara
18.	Magnesite	12 million tons	2,162 tons	45,000 tons—sufficient to feed basic refractory plant at Hattar	Zhob and Hazara.

Source : Geological Survey of Pakistan.

The Geological Survey of Pakistan is primarily responsible for collecting and providing geological information through systematic geological mapping. It also carries out exploration and appraisal for solid minerals, including geophysical and geochemical surveys and test drilling.

In 1961, the Oil and Gas Development Corporation was established in the public sector to expedite the pace of oil and gas exploration. The Soviet government extended a credit of Rs. 142.9 million to finance the cost of import and machinery and to cover the expenses of Soviet experts. Another credit of Rs. 100 million was extended in 1969. When these credits were exhausted in 1973, Soviet assistance continued under a protocol and barter agreements. OGDC has carried out extensive aeromagnetic, geological and seismic surveys. It has so far drilled 15 exploratory wells and 8 development wells resulting in the discovery of one oil field at Tut and gasfields at Sari (near Karachi), Hundi (Dadu district) and Rodho (Taunsa Sharif).

At present seven oil companies in the private sector are engaged in the exploration of petroleum—Amoco Pakistan, Winter-shall A.G., Marathon Petroleum Pakistan Limited, Pakistan Oilfields Limited, Trend Pakistan Corporation, Pakistan Texasgulf, Pakistan Petroleum Ltd., and Attock Oil Company.

In 1974, the Mineral Development Corporation was set up and entrusted with the task of mineral exploration and development; in effect it took over this part of the functions of

the Pakistan Industrial Development Corporation. In 1974, yet another organisation (Resource Development Corporation) was set up by the Federal Government to launch a programme of exploration and development of the Saindak Copper deposits in the Chagai district of Baluchistan. RCD's present estimates of copper reserves are 250 million tons with an average metal control of 0.5%. In addition to all these, separate Mineral Development Corporations are also working in each of the four provinces. The creation of six Corporations to replace one department of one Corporation naturally called for a coordinating agency; this led to the constitution of the Mineral Development Corporation.

**Coal:** The coal deposits of Pakistan are associated with tertiary rocks and show a high range of variation even within the same bed. On the basis of analytical results, these coals may be classified as lignite to sub-bituminous showing non-coking or weak coking properties. They have low contents of fixed carbon, high sulphur and ash and low to moderate calorific values which range between 7,400 to 12,400 British Thermal Units per pound.

The total recoverable reserves of coal, as estimated by the Geological Survey of Pakistan, stand at about 470 million tons which can theoretically provide 8,911 trillion B.T.V. of energy, or 10% more than the energy yield of all Sui gas deposits. Coal is being mined and developed in the public sector by the Pakistan Mineral Development Corporation and by the private sector. The annual production of the PMDC's mines is: Makerwal 1,80,000 tons, Degari, 80,000 tons, Sor Range 50,000 tons and Sharigh 40,000 tons. The Pir Jehanian and Lakhra coalfields are new. The Lakhra fields in Sind are the largest with estimated reserves of nearly 240 million tons and proven reserves of 21.9 million tons.

At present, about 90 per cent of the coal production of 1.6 million tons is consumed by brick-kilns. Other consumers of coal are fertilizer factories (4%), power generation (5%), and domestic households (1%).

In the context of increased oil prices the technical and economic aspects of utilising Pakistan's coal resources need to be carefully studied. A serious attempt should be made to reduce transport costs and increase productivity. Coal production is planned to be increased to 3.3 million tons in 1979-80; some two-thirds of the increase will be by the Pakistan Mineral Development Corporation. Consideration should also be given to switching over certain industries to coal which should replace natural gas; for instance PIDC's industrial complex at Daudkhel could switch back to coal.

**Natural Gas:** The total recoverable gas reserves are estimated at 16.89 million million cubic feet, or 13.3 million million cubic feet Sui-quality gas. These can be economically exploited from seven fields at Sui, Mari, Khandkot, Mazarani, Sari, Hundi and Dhulian. Three fields at Uch, Zin and Khairpur have so far been considered uneconomical for commercial exploitation. The natural gas reserves in Pakistan are indicated in Table 22.6.

TABLE 22.6

*Natural Gas Reserves in Pakistan*

Location	Estimated Reserves (In million million Cft.)
1. Sui	8.62
2. Zin	0.10
3. Uch	2.50
4. Khairpur	1.00
5. Mari	3.94
6. Mazarani	0.09
7. Khandkot	0.41
8. Sari Sing	0.03

9. Hundi	0.05
10. Kothar	Being evaluated
11. Rodho	—do—

The maximum daily consumption of Sui gas is expected to increase from 400 million cubic feet in 1974-75 to 750 million cubic feet by 1979-80 and is expected to reach its optimum level of 800 million cubic feet during the period 1980—85. At this rate of consumption the, Sui gas reserves can last only up to 1995-97.

The share of natural gas in overall energy consumption is 31% (35 percent, including use as feedstock in fertilizer). The general pattern of utilization is as under:—

	Percentage share
Power	35.0
Fertilizer	21.5
Cement	15.2
General Industry	24.2
Commercial and domestic	4.1
	<hr/> 100.00 <hr/>

At present, some 24.8 thousand tons of LPG (liquid gas) are produced annually. The production can increase to over 100,000 tons with the expansion of refinery capacity in the country and with adjustments in the refineries mix.

Of the present production, the allocation for local marketing and export is as follows:—

(1) 8 thousand tons ex-PRL (Karachi)	5 thousand tons per annum Ex-PRL for local marketing. 3 thousand tons per annum for Quetta and Larkana.
(2) 16.8 thousand tons ex-AOC (Dhulian)	14 thousand tons per annum for local marketing to Fauji Foundation. 2.8 thousand tons to Burshane.

The transmission of gas is undertaken by Sui Gas Transmission Company (SGTC) and the Sui Northern Gas Pipelines Limited. The SGTC undertakes bulk transmission from Sui towards the southern parts of Pakistan. In mid-1975 it was supplying 147 million cu. ft. per day through a 16-inch pipeline on the left bank of the Indus. Of this, 81 million cu. ft. per day is supplied to Karachi Gas Company and 66 million cu. ft. per day to Indus Gas Company for distribution to the consumers. An 18-inch pipeline is being laid on the right bank of the Indus to meet the increased demand of the Karachi Steel Mill and to feed towns en route (Larkana, Dadu and Sehwan). The capacity of Sui Northern Gas Pipe line (SNGP) which performs the dual function of bulk transmission and distribution in Punjab and NWFP, is 277 million cu. ft. per day. In view of the increasing demand for gas by WAPDA and industry its capacity is being increased to 415 million cu. ft. per day. This additional capacity will meet the requirements of the Multan Pak Arab Fertiliser Factory and the 200 MW Lyallpur Gas Turbine Station.

The utilisation of natural gas from Sui will approach its optimum level with the expansion of the SGTC and SNGP and its future use should be restricted as an industrial feed-stock. Use of Sui gas for power generation and cement plants should be discouraged. Mari gas should be fully exploited and should so the dormant gasfields. Exploration for new gas fields should not be delayed until the day when the proven reserves are nearing exhaustion. Besides recovery of liquid petroleum gas should be emphasised and its distribution in the rural areas improved.

**Oil:** For decades and decades the world (particularly the industrialised world) made great strides in industrial development which was assured of regular oil supplies at cheap prices. The availability of cheap crude fuelled an extraordinary rate of economic growth, and those countries who really developed fast basked in the glories provided by cheap energy. Then in 1973 began the extraordinary spectacle of a major shift in resources from the industrialised countries and the under-developed countries to the oil producing countries. It all started in 1970 President Gaddafi demanding an extra 40 cents per barrel and threatening production cutbacks if the oil companies refused to agree. In 1973 the OPEC (Organisation of Petroleum Exporting Countries) quadrupled the price of oil in a couple of months. Since then prices of oil have increased further and in October, 1975 they had risen almost fivefold compared to their 1973 level. The non-oil LDCs are in severe economic straits. On the one side the fivefold increase in oil prices combined with an approximately 10% increase in oil consumption (particularly for those with reasonably ambitious development plans) has placed an intolerable strain on their external resources. OPEC countries have attempted to mitigate their desperate condition by extending assistance in the form of loans, but these loans have to be paid back and thus constitute a mortgage on future earnings. On the other side the industrialised countries are putting up their prices of the manufactured goods, especially producer goods and industrial raw material so urgently needed by developing countries. The industrialised countries argue that their inflation is fuelled by higher oil prices. The oil producing countries forcefully and rightly argue that they have to increase oil prices to sustain their purchasing power which is substantially diminished by inflation in the industrialised countries. They further maintain that oil is a non-replenishable resource and they have to make the most of it in order to ensure for their future generations a strong and viable economy which should rest on a strong industrial and agricultural base. Their case has been ably argued by Dr. Jamshed Amouzegar, the distinguished Oil and Interior Minister of the Imperial Government of Iran (and an old friend of the author), who has wisely used the expertise of the international oil companies to arrange the distribution of Iranian oil without upsetting the international marketing. And in the spirit of Third World solidarity and Islamic brotherhood the non-oil LDCs rally to the call of the Third World oil producers! Where it will end is anybody's guess but the problem of the Third World LDCs might well be solved through the natural process of the weak being humbled in the battle of the giants. But "blessed are the meek, for they shall inherit the earth."

Oil accounts for 42% of the total energy supply in Pakistan. The consumption pattern of petroleum products indicates that the transport sector is the largest consumer and accounts for 58.7% of the total consumption (road 30.1%, railways 14.3%, aviation 9%, bunkers 3.3%, and others 2%). Domestic consumption (kerosene oil) comes next with a share of 12.2% while industry consumes 10.1%. The power sector consumes 3.4% and agriculture and other sectors 15.6%. The consumption of POL (petroleum, oils and lubricants) was about 3.82 million tons in 1974-75 and the demand is increasing at the rate of about 12½ per annum. Domestic oil production was only 0.32 million tons which was about 8.4% of the total demand in 1974-75. The demand in 1980 is estimated at 5.78 million tons. The proven reserves on the basis of the existing level of technology are 40 to 50 million barrels at Tut and close to 50 million barrels at Mayal. So far Mayal is the country's biggest oil producing field. By the end of 1975 Tut production will be around 4,000 barrels a day. Experts agreed that Pakistan has substantial reserves of oil, but unfortunately the drilling density during 1947—1971 was less than three wells per year (or two per cent of the world average). At present Tut and Mayal oil-fields are producing 7,000 to 8,000 barrels of crude per day. This could increase to 28,000 or 30,000 barrels per day during the next two years as a result of the accelerated development programme at these fields.

Import of POL products amounted to Rs. 256.5 million in 1971-72; with the increase in oil prices the import bill rocketed to Rs. 3,500 million in 1974-75. With the 10% rise in oil prices in October 1975 and assuming Pakistan's demand for imported POL to use by 12½%, the import bill for POL in 1975-76 could amount to Rs. 4,330 million, or more than 40% of the total export earnings. The import of the oil price increase is reflected in Table 22.7.

TABLE 22.7  
*Quantity and Value of POL Products*

Year	POL Import (Million Tons)	% increase over previ- ous year	Value (million rupees)	% increase over previous year
1971-72	3.150	—	256.5	—
1972-73	3.098	—1.6	649.1	+153
1973-74	3.640	+11.7	1500.1	+131.1
1974-75	3.820	+11.7	3500.0	+133.3

Source: Statistics Division.

The POL consumption pattern is light distillates 12.62% (motor spirit and high-octane blending component 10.18% J.P.4 aviation spirit and others 2.44%), middle distillates 65.71% (kerosene 15.12%, high speed diesel oil 34.53%, light diesel oil which is primarily used in agriculture 13%, and others including JPI 3.062%), and fuel oils 21.68%.

The price of petroleum and petroleum products in Pakistan has reacted to the ricocheting of imported oil prices. Table 22.8 indicates the trend over the past two years.

TABLE 22.8  
*Prices of Petroleum and Petroleum Products in Pakistan*

POL Products	Pre-Nov. 1973	Nov. 1973	Jan. 1974	June 1974	Feb. 1975	October 1975
Gasoline 100 octane (per gallon)	7.20	10.00	11.50	12.00	13.00	14.50
Motor Gasoline (per gallon)	6.25	7.50	9.00	9.50	10.50	12.50
High Speed Diesel Oil (per gallon)	3.00	3.96	5.00	5.50	5.50	6.00
Kerosene (per gallon)	2.00	2.50	2.50	3.00	4.00	4.00
Light Diesel Oil (per gallon)	1.75	2.30	3.75	4.00	4.00	4.00
Furnace Oil (per ton)	240	340	500	500	500	500.00

Source: Natural Resources Division.

An analysis of the price structure for some petroleum products as given in Table 22.9 (figures relate to 1 October 1974) would indicate the large mark-up in prices ex-refinery and how the extra charges are shared between the government, distributor and transporter.

TABLE 22.9

*Price Structure per Gallon for some Petroleum Products on 1 October 1974*

(Rupees per gallon)

Price Structure	Motor Gasoline	Kerosene	Automotive 100 Octone	Light Diesel Oil
(i) Ex-refinery	4.6982	1.7880	7.0343	2.7324
(ii) Customs and Excise duty	4.0000	0.2000	4.0000	0.5750
(iii) Distributor's margin	0.3561	0.1573	0.2989	0.1214
(iv) Prescribed price	9.05	2.15	11.33	3.43
(v) Development Surcharge	0.02	0.54	0.02	0.28
(vi) Inland freight	0.18	0.31	0.40	0.29
(vii) Dealer's commission	0.25	—	0.25	—
(viii) Fixed sale price	9.50	3.0	12.00	4.00

Government apparently takes a large slice off every gallon of POL sold in Pakistan. Light diesel oil which is mostly used in agriculture gets away with lighter treatment.

There are three oil refineries in Pakistan.

- (i) The Attock Oil Company.—The Attock Oil Company near Rawalpindi has the capacity to process about 0.5 million tons per year of indigenous crude.
- (ii) Pakistan Refinery Limited (PRL) at Karachi can process 2.5 million tons per year of imported crude.
- (iii) National Refinery Limited (NRL) at Karachi can process about 0.55 million tons of imported crude.

The National Refinery Limited is planned to be expanded from 0.55 million tons a year to 2 million tons a year by mid-1976 and the installation of a visbreaker in PRL is expected to be commissioned the same year. Thus by end of 1976 the total crude refining capacity in Pakistan is likely to increase to 5.0 million tons per year. In addition a 2 million tons refinery at Multan with Abu Dhabi's participation will be commissioned by 1977-78.

The solution of the oil shortage must be sought in the discovery of proven oil reserves. This would require large scale exploratory drilling between 1975—80, something of the order of 200 wells involving a total drilling of about 2 to 3 million feet. Drilling on this scale would need large outlays, anything from \$600 million to 1000 million. The cost of drilling in Pakistan is anything from \$3 million for a 10,000 feet deep well to a little over \$5 million for a 16,000 feet deep well. The availability of drilling rigs and technical personnel required to back up an operation of this character may pose some problems. Anyway the risks are well worth taking. The search for oil is really an adventure for the large-hearted, and given God's grace and human efforts it can be found to help build a better Pakistan. Out of a total area of 310,000 square miles Pakistan has a large sedimentary area of about 200,000 square miles. According to the Oil and Gas Development Corporation the estimates of total predicted hydro-carbon reserves of the on-shore prospective sedimentary areas of Pakistan are 53 billion barrels of oil; at current prices this would be the equivalent of some 600 billion dollars. Pakistan cannot undertake an exploratory programme of the suggested magnitude without involving foreign investments on a large scale. The terms offered by Pakistan would have to be really attractive to the foreign investor in order to secure investments of this order. The foreign investor would also have to be assured against nationalisation and against any variation detrimental to his interests



in the terms which are negotiated: "Nothing venture, nothing win" is an adage which applies with great force to the oil industry.

Production from proven sources should be speeded up including that from stripper wells where the output may be small. Current indigenous production is 6,500 barrels a day as against a requirement of 70,000 barrels a day. Out of the oilfields at Khaur, Dhullian, Joyamair, Balkassar, Karsal, Tut and Mayal, the two fields at Balkassar and Dhullian will be exhausted soon. However, a conservative estimate of the Tut Oilfield is 35 million barrels and the actual reserves may well be much more. There should be no serious problem in increasing production at Tut to 20,000 barrels per day by 1980; this would save some \$80 million per annum at current prices. The required refining capacity would be available at Morgah and Multan. Naphtha and furnace oil, of which there is a substantial surplus, should continue to be exported. Pakistan should be careful in establishing new refining capacity. All the oil producers are going in for oil refining in a very big way and it is well within the realms of probability that in the near future imported refined products may be obtainable at lower prices as compared to crude oil.

## POWER

### Power as a factor of development

The progress of human civilisation is based on an ever-increasing use of power. Energy provides the means of man's mastery (at least partial) over nature and add much to his physical and mental capability. In the course of the past 150 years the production and consumption of energy has increased well over 150 times. The development of power resources has by no means been evenly spread all over the world. The developed countries have secured the lion's share of energy although the sources of energy are to be found largely in the LDCs. For years the industrialised world has prospered on the basis of abundant energy resources secured at relatively cheap prices. While the consumption of energy per capita is well over 3 tons equivalent of coal in the developed countries it is under half a ton in South Asian countries. Even in the developed countries North American per capita energy consumption is about twice as high as that of Western Europe. Energy is fundamental in the process of changing raw materials into products and moving them to their point of use. Thus a national energy policy is the core of economic development. The coordination of the energy policy with the requirements of national defence is very necessary in the interest of national security.

The following general conclusions emerge with regard to power as a factor of development in the under-developed world:

- i) In the near future an important increase in demands for useful energy should be anticipated to a great extent, to the requirement of the industrialization of under-developed countries.
- ii) The method, the accelerated tempo and technological conditions of the industrialization in under-developed countries demand a considerably faster increase of production and consumption of energy, than was the case in Western countries at a comparable stage of development.
- iii) Some under-developed countries have already made an effort towards the economic calculation of the correlation between the consumption of energy and the increase of national income, which is a considerable help in their efforts towards the planning of the economic development. It would be commendable if other countries also executed such calculations on the same methodological basis.
- iv) In view of the nature of industrialization as well as the present technological development, one may not expect, however, that the growth in energy requirements as a co-efficient of increase in GDP in the economies of under-developed countries will remain constant for a long period of time. For this reason it is necessary to check measurements from time to time.
- v) The basic limiting factors in the development of electric energy in under-developed countries are probably neither natural sources nor technical knowledge, but financing. The

development of electric energy should, therefore, be looked upon as a function of the economic mechanism.

- vi) The nature of modern most profitable building of power plants, which can produce the cheapest energy, is such that it requires large units of capacity. This fact and the perspective of economic development are the reasons why the under-developed countries are recommended to start from the very beginning with the establishment of long-distance transmission lines and a national energy network—which will ensure a higher utilization coefficient factor, and from which they can expect further savings.
- vii) Efforts to achieve higher efficiency in the generation and consumption of energy in under-developed countries are not yet satisfactory. Every such effort is equal to the increase of production of primary energy. The increase of working efficiency of energy is, in some respects, the function of the complex economic development of a country and to a large extent also the application of present technological processes and rationalization during the production.
- viii) Under-developed countries should make speedy preparations for the advent of the atom era. The comparative costs show that the direct industrial production of nuclear energy at present still does not offer a price advantage, but it is obvious, without any doubt, that this new kind of energy will open vast possibilities for the development of under-developed countries within a few years. These countries, therefore, should pay great attention primarily to the education of expert personnel and to introducing, intensively, isotope technology in the various regions of economical and social life of under-developed countries.
- ix) The approach of the atomic era demands closer international cooperation. The building of atomic reactors and regular supply of enriched fuel demands the broadening of international cooperation. The prospective possibilities of industrial application of atomic energy underline the already serious problem of financing power development.
- x) The present knowledge as well as the planned development of economy enables under-developed countries to exploit water sources. Researches show that the various uses of water can come into conflict, which demands not only technical but also concrete planning giving priority to the multi-purpose water projects.
- xi) The lack of reports concerning the problem of the complex utilization of fossil fuels and especially concerning the economy of utilizing poor quality fuels, shows that important technological progress in this region has not been matched yet by adequate investigation in under-developed countries.
- xii) The twin dilemmas of energy and the environment may provide man with the best chance to reassess some old assumptions and reorder his priorities for a more pleasant life. Air pollution poses a serious problem due to shortage of low-sulphur fuels. Techniques are being developed to collect the most harmful fumes but these are currently so expensive that LDCs can hardly afford them. Pollution on an increasing scale is the price most LDCs would probably pay for accelerated industrial growth, but to the extent that LDCs can afford anti-pollution measures should form a part of every programme of energy and industrial development.

#### a) Nuclear Power

Nuclear power for generation of electricity is being developed at an extraordinary pace in developed countries and LDCs following the sixfold increase in oil prices during the past two to three years. Following the energy crisis it has become the aim of national economic policy to attain the maximum degree of self-sufficiency in energy requirements. Nuclear energy provides the major source of securing additional power for countries which can afford it. Even the oil-producing countries are developing nuclear power. Productivity is substantially dependent on the availability of a cheap and abundant supply of energy. Nuclear power has provided the answer for it is inexhaustible and has many uses in addition to the generation of electricity. The world consumption of energy is rising at 6% per annum and at this rate the known reserves

of oil and gas would run out in about four decades. Electricity because of its obvious advantages of production and transmission forms about 25% of total energy consumption and this is expected to increase to 50% by the end of this century. The case for changing from the present oil-gas economy to an electrical energy economy has been eloquently argued by His Imperial Majesty Mohammed Reza Shah Pahlavi in a press conference in 1975:

"Why should we waste this precious oil? Why should we finish this noble product in, say, 30 years' time when thousands of billions of tons of coal remain in the ground. The world should have started to extract coal years ago. We should try to find, as soon as possible, new methods to generate atomic energy in an economic way and probably this will be the fast breeder system. Electrical bulbs should be lit by that kind of energy. Trains should be put in motion by that kind of energy. Factories should run on that kind of energy. Private traffic in Tehran and any other Iranian city should consist of small electric cars. At the first opportunity, we will order atomic power plants, and as far as possible, produce electric power in this country without using a single drop of oil or even natural gas."

The operation of nuclear reactors is possible because of "nuclear fission", a property of a few heavy elements. In this process the nucleus of the atom captures a neutron, then splits into two parts, at the same time releasing several neutrons (two and one-half per fission on the average, in the most common type of fission reaction) in addition to some of the energy that held the nucleus together. A neutron is one of the elementary particles of matter found in the nucleus of all atoms except those of the most common isotope of hydrogen. There are three available atomic species that will undergo nuclear fission upon capturing a slow-moving neutron. These atoms are uranium and plutonium isotopes — Uranium 235, Uranium 233 and Plutonium 239—which are termed "fissionable materials."

A nuclear reactor is designed to bring together a quantity of fissionable material in the proper amount and spatial arrangement so that at least one of the neutrons emitted by a fissioning atom produces fission in another fissionable atom, thus maintaining a "chain reaction." Of the fissionable materials, only Uranium 235 occurs in nature, hence it is the starting point in harnessing nuclear energy. Fissionable material used in a nuclear reactor is termed "nuclear fuel."

The fission products contain over 200 radio isotopes, the relative proportions of each depending on the type of fuel employed and the length of time the chain reaction has been allowed to proceed. They include isotopes of some of the common elements such as iodine, cadmium and molybdenum, as well as those of less familiar and rarer elements. The total weight of fission products equals, for all practical purposes, that of the fissionable material burned, since, despite the enormous energy release, the amount of fissionable material converted into energy in the chain reaction is infinitesimal.

The fission products, however, absorb neutrons, and thus interfere with the efficiency of the reactor. If allowed to accumulate indefinitely they will eventually stop the chain reaction. Because of this the fuel must be removed and "processed" to separate the fission products and reclaim the unburnt fissionable material. Fuel elements removed for this purpose are termed "spent fuel elements." Any reactor design must strike a balance between the buildup of contaminating fission products and the length of the fuel cycle (i.e., the degree of burn-up). An alternative being pursued in more refined reactor designs is to use the fuel in liquid form, permitting continuous processing of a portion of the fuel in a separate loop outside the reactor.

The applications involving nuclear reactors are mainly generation of electric power, heating, propulsion, radiation, medical application, research and isotope production.

Harnessing atomic energy to produce electric power is a rather indirect process. The heat energy produced by fission is used to generate steam, which drives a turbine connected to a generator, which produces electricity. Atomic energy in this process thus merely replaces the combustion of a conventional fuel. Although the process in itself involves no technological advance in power generation once the atomic energy is made available, it does embody an innovation of great potential significance—the use of fuel whose potentially available energy content is so great that, compared with the convention fuels, its weight and volume are practically zero.

A nuclear reactor is in effect used for its heat output in the production of electric power. It is possible to use the waste heat (or steam that contains the heat) from a power reactor for its heat content, but in this sense the circumstances are no different from those of a conventional power plant. A "heat reactor" is here considered to be a reactor the end-product of which is heat, carried by either steam or gas. A heat reactor can serve either for space heating (i.e., the heating of buildings) or for process heat in industrial operations.

The potential applications of the nuclear reactor as a source of propulsive energy include all three transportation media—land, sea and air. According to one estimate, the major part of the U.S. reactor programme is now devoted to propulsion reactors. Mostly these reactors are for the Armed Forces.

A substantial portion of the energy generated in a nuclear reactor is in the form of radiation, of which there are four types: alpha, beta, gamma and neutron. The special significance of a nuclear reactor as a radiation source is not that it is a unique source—each of the radiation types can be produced by other means—but because it yields radiation in massive quantity. The primary use of a nuclear reactor for radiation is subject to the economic disadvantage of high initial outlay common to all reactor uses, and to the physical handicap that most materials subjected to the reactor's neutron radiation will capture some of it and thereby become radio-active. Although this induced radio-activity is not permanent, it does multiply the hazards and difficulties of handling and using the material until the radio-activity is sufficiently decayed.

The medical reactor, whether considered for therapy or for research, is another "radiation" reactor in that it is used as a radiation source rather than for heat or power. In this respect it must be considered in the same light as other radiation reactors—it is merely one of several means of providing atomic radiation. Not only are medical reactors expensive, but the uses of such a reactor for therapy are not yet advanced enough.

The nuclear reactor can also be used for multipurpose research on radioisotopes, radiation sources, power development, medical and biological research, physical research, and for the testing of materials and equipment.

Production of radioisotopes is another form of application for nuclear reactors. Radioisotopes can be used in processing and process control. In processing their use is by and large confined to the chemical and petroleum refining industries. For process control radioisotopes can be used to show physical dimension, rate of movement or flow, level of stock or product, and stage of process. Atomic radiation can be applied for food preservation through sterilisation, pasteurisation, insect and parasite destruction, and inhibition of sprouting (irradiation of onions and potatoes will delay sprouting in storage and can be done during harvesting or packaging).

Thus the nuclear reactor can be much more than a vehicle for the generation of power. But for quite some time to come its use will by and large be concentrated on the production of energy to move the wheels of industry, transport and agriculture.

In Pakistan a good start has been made in the development of nuclear power. In view of the importance of nuclear energy in the economy of country, the Pakistan Atomic Energy Commission (PAEC) has chalked out a programme for the construction of nuclear power plants in the country. The objective is to provide the country with an assured supply of electric power at reasonable cost to meet its future requirements. This can only be achieved by acquiring self-sufficiency in the planning, construction, operation and maintenance of nuclear power stations and nuclear fuel cycle facilities and other ancillary plants. The construction of the Karachi Nuclear Power Plant (KANUPP) with a gross output of 137 MWe which went into commercial operation in November 1972, is the first step in this direction.

For the immediate future PAEC has drawn up firm plans for two more nuclear power stations. The second station of about 600 MWe capacity is to be set up in the North and is required to be ready by 1982. Site and soil investigations are being carried out and negotiations for the purchase of the reactor are initiated. The third nuclear power plant would be dual-purpose to generate 400 MWe electricity and 100 MGD of fresh water for Karachi by the early 1980's. After 1985, a stepped-up programme envisages the construction of a nuclear power plant almost every year till the end of the century.

For the successful operation of nuclear power plants, the Commission has chalked out a programme of training, research and development and build-up of industrial infrastructure.

Regarding training of technical manpower in the nuclear field, PAEC has got a nuclear reactor school located at the Pakistan Institute of Nuclear Science and Technology (PINSTECH). To impart comprehensive training the duration of the course is of 16 months and the students are trained at the 5 MW Research Reactor of PINSTECH and other nuclear facilities. After the successful completion of this course and practical training, they are awarded M.Sc. Nuclear Technology degree by the Islamabad University.

To impart practical, on-the-job training, another training programme has been started at Karachi Nuclear Power Plant (KANUPP). PAEC has bilateral agreements with several countries for the specialised training of scientists and engineers. Total foreign trained manpower in the Commission now stands at about 350.

The Commission has also entered into collaboration with the national universities in order to promote nuclear science and technology in the country.

Experience shows that at least three to five years training is required before a fresh graduate engineer or scientist can take part in the construction of nuclear power plants or do some research work. It is therefore imperative for the Commission to plan in advance so that a well-trained corps of engineers and scientists is available to shoulder the responsibility of planning, construction and operation of these plants.

It is hoped that after five years a team of 1,000 engineers and scientists and about 4,000 trained technicians would be available.

To support the nuclear power programme, we require indigenous supplies of uranium. Geologically, Pakistan is a promising area and we expect to locate uranium deposits for which intensive exploration has been undertaken.

Apart from essential precision and exactness about 75 per cent of the equipment of nuclear power plants are similar to the conventional engineering system. Efforts should, therefore, being made to make use of the local industry for the supply of the possible equipment.

The favourable aspect of nuclear power is its lower dependence on a continuous supply of fuel. On the other hand, problems arise because of the large initial investment required, economies of scale which require large-sized units and the disposal on nuclear waste. This is an area which is receiving increasing attention in the industrialized countries as it reduces dependence on fuel supply. Technological developments may reduce initial cost and would considerably improve the economies of nuclear power. These would have to be watched carefully for application to Pakistan.

## **New sources of energy**

New sources of energy popularly include solar, wind, geothermal and tidal energy. With the exception of the thermal energy of the seas, the non-conventional sources of energy have long been employed in a limited way. Attention is being increasingly focussed on these new sources on account of the increasing demand for energy combined with the ricocheting of oil and gas prices and the promising research results in the development of the so-called new sources.

Solar radiation has long been used to hasten plant growth in greenhouses and to evaporate water in salt works. Modern solar energy exploitation, still mainly in the research stage, varies from measurement of solar radiation to advanced experimentation in numerous countries. Basic processes for converting solar radiation into useful energy may be divided into two general groups: those related to heat and those related to light. Thermal processes are now being developed either for obtaining heat at various temperatures or for direct conversion of solar heat into electricity. The range of temperatures achieved mainly depends on the degree of concentration of solar radiation obtained by the collectors used. Low temperatures (below 100°C.) are the easiest to achieve. For this, flat plate collectors are used. Black radiation-absorbing metals, for example, are placed in transparent enclosures and are thereby made to heat water or some other medium utilized for transfer of usable heat. Low temperature process have many applications, such as those for heating and distillation of water. Lenses of reflecting mirrors are necessary to obtain temperatures beyond a few hundred degrees. As these lenses or mirrors capture only the direct radiation of the sun, they must be turned frequently to keep the sun focussed. The heat captured and the temperature obtained depend upon the quality of the reflecting surface and the precise

shaping of the parabolic collectors. Accordingly, a distinction is made between medium temperature devices and high temperature furnaces. The heat in the former, below  $1,000^{\circ}\text{C}.$ , may be directly utilised in low temperature furnaces and in cookers, or may be transferred through media similar to those utilised with flat plate collectors to run engines of various types. High temperature furnaces ( $1,000^{\circ}$ — $3,500^{\circ}\text{C}.$ ) are used for industrial and research purpose to treat refractory or metallic materials, for chemical reactions and even to produce high pressure steam.

Solar heat may also be utilised for the direct conversion of solar energy into electricity. The process is based on thermocouples of two unlike metals joined as in a hoop. When one joint is placed in the sun and the other kept cool, an electric current is produced. There are, however, many difficulties in the exploitation of this process, and the over-all efficiency is low.

Solar radiation coming as light may be converted to useful forms of energy through various photochemical and photoelectric processes.

Wind energy has long been used for mechanical water pumping. However, modern utilization is aimed more towards electricity production, and studies in this field range from wind surveys to advanced plant design and testing. Electric windmills are in commercial production or actual operation in several countries, including Australia, Canada, Denmark, France, Germany, the Union of South Africa, the Soviet Union, the United Kingdom and the United States.

The kinetic energy in a column of moving air or wind, which increases in cubic proportion to the velocity of the wind, is intercepted by a rotor or propeller, transforming the energy into usable mechanical power. The basic elements determining the energy obtainable are the speed of the wind, the size of the area swept by the rotor, and the conversion efficiency of the plant.

Whatever the diameter of the rotor chosen, electric windmills are designed to give their maximum power capacity at a chosen or "rated" wind speed. Energy in a wind of velocity beyond the rated speed is wasted, and in the case of wind with lower velocity, the energy input and conversion efficiency of the plant decrease rapidly. Windmills may in theory extract perhaps close to 60 per cent of the power in the wind, but in practice losses in the rotor and in the gearing, and electrical losses, are likely to reduce the over-all efficiency to some 40 per cent or less.

## TIDAL ENERGY

Exploitation of tidal energy has recently been studied extensively in several countries, notably Argentina, Canada, France, the Soviet Union, the United Kingdom, the United States and also Brazil, Germany, the Netherlands, New Zealand and Spain.

The mechanical energy of tides may be harnessed and converted into electricity. In principle, the conversion process is akin to conventional hydro-power, utilizing falling water. A basin is filled during high tide and closed at ebb-tide, when the tide recedes, so that a difference in head on ebb tide is created, or *vice versa*. When the water is allowed to fall toward the lower side of the barrage, which contains sluices and machinery, it operates a turbine. The turbine in turn drives a generator producing electricity.

New ideas and refinements are arousing more interest in the possibility of utilizing tidal energy effectively. Instead of a single basin, two or more communicating basins may be built and utilized to give greater flexibility so that one basin generates power during the filling stage and another during the emptying stage, and water can be turbined between basins. More important, however, is the recent development of turbines able to operate in both directions of water flow and also to act as pumps, and a combination of turbine and electric generator in bulb-type units operating efficiently submerged in water.

Practical utilization of geothermic energy for the generation of electricity is a fact in Italy, where facilities reached a capacity of 274,000 kilowatts by the end of 1954 and gave an annual output of nearly 2,000 million kilowatt-hours.

Large-scale use has been made of geothermic energy for heating in Iceland, where it is estimated that the steam fields could yield a total power of 300,000 kilowatts (463). The possibilities of heating with geothermic energy are also being explored in some other parts of the world, such as the western United States and several regions of the Soviet Union.

Geothermic energy comes as natural steam or hot water, mixed with various chemicals, under pressure in hot springs and fumaroles. Provided the natural steam has sufficient volume, temperature and pressure, it may be led through a turbine driving an electric generator and then exhausted into air. In more advanced plants chemical by-products are also obtained.

Contributions to the exploitation of thermal energy of the seas date back about fifty years to a demonstration in France of the possibility of producing energy from a small temperature difference between two masses of water.

The capture and conversion to useful energy of heat stored in sea-water represent an ingenious application of the principle that heat can be converted to mechanical work when two heat reservoirs of different temperature are available. Such reservoirs of enormous size are found in the sea, in which the surface water is heated by the sun, and in certain areas maintained at sufficiently higher temperatures than deeper water for the difference in temperature to be utilized.

The basic machinery comprises an evaporator, a turbine-generator set and a condenser. The process operates as follows: the warm salt surface water enters a low-pressure vessel, in which a vacuum is created with an air gas extractor, and part of the warm water flashes into vapour. The steam thus produced is "inhaled" by a condenser cooled by cold water pumped up from a deeper layer. On its way, the steam is intercepted by, and drives an extremely low-pressure turbine which in turn runs an electric generator. The condenser may be of the jet type, in which the steam mixes with the cold salt water, or it may be a surface condenser turning the steam into useful fresh water as a by-product. The over-all conversion efficiency varies with the temperature difference. For electricity production, the temperature difference between surface and cold water must be about 20°C., which may require pumping from great depth, and tremendous quantities of sea-water must be used to produce a reasonable quantity of power.

In speaking of the size of plants suitable for the exploitation of new sources of energy, a clear distinction must be made between those employing solar and wind energy and those designed to use geothermic energy, tidal energy and thermal energy of the seas. Solar and wind plants are very flexible in a small range of capacity, down to a fraction of one kilowatt, and therefore are particularly suited for isolated farms or small communities. Wind units may range in size up to a few thousand kilowatts. Economy of size is difficult to determine because capacity is related to wind conditions at the selected site and upon the rated speed chosen, but in general the unit cost decreases with increasing size. Under certain conditions, however, several small wind power plants may be more economical than one large unit.

Solar energy capacity usually increases in direct proportion to the size of collectors. In other words, there is little economy of scale. Furthermore, as relatively large-scale plants may be subject to wind hazards, it is generally considered more practical to have several small solar units than a large one. If such groups of solar plants can be combined as to maintenance, some economies in operation may be obtained.

Units for the other three energy sources in principle can be built in small size, but in practice the minimum size is over 1,000 kilowatts for plants using thermal energy of the seas (3,500 kilowatts net under the conditions at Abidjan), and generally also for geothermic plants beyond the pilot stage (3,000 kilowatts being the smallest size in Italy) and for tidal plants.

The scale of plant in the case of tidal geothermic energy is limited by energy resources conditions, purpose of plant and market. Tidal plants may be very large and employ many generating units: the size of the latter is limited, perhaps up to 25,000 kilowatts, and partly depends on the height of the tide difference. The main economy of scale in tidal plants lies in dam construction and other ancillary engineering works.

The size of geothermic plants depends primarily on local natural steam conditions. Although simple plants of small size can be built at quite low cost, the cost of drilling for and developing steam is a major factor. More refined units with larger turbines and generators (up to 25,000 kilowatts in the case of Larderello) permit a greater power output from a given quantity of steam; investment is higher in such steam-using plants but the unit cost decreases with an increase in size and a higher investment may be justified when demand is large, the steam supply limited, and recovery of chemicals also is desired. Steam exploration and development costs obviously are lower per kilowatts in larger plants.

For plants designed to utilize the thermal energy of the seas, a very wide range of plant capacity is feasible. Although no plant utilizing thermal energy of the seas is yet actually operating, it is believed that costs would rapidly decline with an increase in scale.

As utilization of the new sources of energy involves no fuel costs, fixed costs are of overriding importance. Once the plant has been constructed, the costs arising from plant operation are minor and as a consequence annual costs, as in the case of hydro-power, consist mainly of amortization and especially interest on capital.

## Review of power development in Pakistan

Pakistan's per capita consumption of energy in 1974-75 was estimated at 200 kg. (kilograms) of coal equivalent which is almost one-tenth of the world average of 1889 kg. In this context it should be noted that major sectors of the economy like agriculture and rural transport use non-commercial sources of energy like draught power, and wood and cowdung are commonly used as fuel for cooking purposes. Limited per capita consumption can also be attributed to a small industrial base, an inadequate transport system and the recent and limited introduction of mechanisation in agriculture. Between 1947 and 1975 the consumption of energy has increased with the growth of the economy, and an estimate by the Planning Commission puts the rate of growth of energy consumption at 12% per annum.

Table 22.10 indicates the pattern of energy consumption in Pakistan and its heat content in trillion British Thermal Units. Oil is the largest source of power (42%), followed by natural gas (30.6% excluding its use as feed stock), hydro-electricity (17%), coal (8%), nuclear energy (2%) and low pressure gas (0.2%).

TABLE 22.10

### *Pakistan's Pattern of Energy Consumption in 1974-75*

Source		Quantity	Heat Content Trillion BTU	Per cent
Natural Gas (excluding its use as feed stock) .. .. .	MMCF	123.835	117.5	30.6
Coal .. .. .	Million Tons	1.60	30.5	8.0
Oil .. .. .	Million Tons	3.59	160.8	42.0
Hydro-Electric .. .. .	Million KWH	5,500	66.0	17.2
Nuclear .. .. .	Million KWH	660	7.9	2.0
LPG .. .. .	Tons	18,700	0.9	0.2
			383.6	100.0

*Source: Natural Resources Division.*

**Thermal power** is generally not dealt with separately while discussing energy resources, since its generation involves consumption of other sources of energy. However, the discussion of this source has been considered necessary as the entire transmission system and use of electric power is based on the total generation of electricity. At present, the total thermal power capacity is about 873 MW. The power is generated by using gas, coal and oil.



The consumption of fuel for thermal power is indicated below:—

	1973-74
Gas (Million Cft)	47,472
Coal (Tons)	51,707
Fuel oil (Tons)	1,53,290
L D O (Tons)	71,457
H S D (000 Gallons)	14,508

The capacity of thermal power and general power and station-wise is indicated in Table 22.11.

TABLE 22.11

*Thermal Capacity*

	Capacity (MW)
1. Multan (Steam)	265
2. Lyallpur (Steam)	132
3. Lyallpur (old diesel and steam)	15
4. Shahdara (Gas Turbine)	85
5. Sukkur (Steam)	50
6. Hyderabad (Steam)	43
7. Kotri (Gas Turbine)	30
8. Quetta (Steam and Gas Turbine)	30
9. Warsak (Diesel)	3
10. Guddu (Steam)	220
Total:	873

Of all the various forms of energy electricity is of the greatest significance owing to its ease of production and transportation and to the multifarious uses to which it can be put, whether it is the pump to irrigate land or the textile loom. Electricity power consumption is itself a good enough yardstick for determining the general level of development and rate of progress.

The long-term programme for development of power prepared in conjunction with the Tarbela project could not be implemented on schedule because of constraints and other unsurmountable problems created by the political difficulties leading to the December war 1971. There will be no addition to the generating capacity during the period 1975-78 except for the commissioning of a 132 MW Nuclear Power Station in the Karachi region. Inordinate delays took place in the execution of a large number of generation projects, particularly at Guddu and Mangla. Delays in the execution of certain vital transmission line projects created transmission transformation bottlenecks which prevented full utilization of even existing capacity particularly in the North. After 1972, the new Government stepped up investments in power and speeded up the implementation of on-going projects. An emergency scheme for installation of gas turbines with an aggregate capacity of 200 MW at Lyallpur was sanctioned. As a result, total additions to installed capacity during the period 1970-75 was 770 M.W. Total investment in power during the period 1970-75 is estimated at Rs. 3512.34 million of which 63.0 percent during that period was in respect of WAPDA.

Despite the acceleration in investment during the period 1970-72 the shortcomings and inadequacies of the power system have been operating as a significant constraint on both output and investment. Even at the end of the period 1970-72, the demand in most regions was in

excess of firm capability, necessitating load-shedding, delay or denial in granting of new connections and other forms of demand suppression. The shortage of capacity has led to virtual elimination of reserves and consequent unreliability of supply. The absence or inadequacy of inter-market links is also a serious drawback. Power losses on the WAPDA system continue to be high and WAPDA is also supposed to be increasing an annual loss of 160 million rupees on account of power thefts and unpaid arrears. The coverage of the power network remains inadequate, with 21.0 lakh consumers and only 3,500 villages electrified.

The total installed capacity by June, 1975, is estimated at 2,670 MW as against the period 1970—75 target of 3,150 MW. The break-up is as follows:

#### Main System

(i) WAPDA	1,821 MW
(ii) KESC	485 MW
Sub-Total	2,306 MW
Isolated stations	130 MW
Captive industrial capacity (Estm.)	234 MW
Grand Total	2,670 MW

The total energy generation during 1974-75 is estimated at 10,700 million KWH as against the period 1970—75 target of 12,200 million KWH. The power system relies to the extent of 43 percent on thermal energy. The output of hydro-electricity is only 51 percent of the total. The balance is met from nuclear sources. The per capita generation for 1974-75 is estimated at 155 units which is very low.

The installed capacity of electricity in 1970—75 is indicated in Table 22.12.

TABLE 22.12

#### *Installed Capacity 1970-75 MW*

Year	KESC and KANUPP	WAPDA	Others	Total	Additions
1970-71	360	1,306	234	1,900	
1971-72	360	1,306	234	1,900	
1972-73	485	1,306	234	2,025	KANUPP.
1973-74	485	1,616	234	2,335	Mangla Units 5 & 6
1974-75	485	1,951	234	2,670	Guddu Unit-I. Guddu Unit 2 Lyallpur Gas Turbines, Quetta Gas Turbines.

The use of electricity by type of consumers is indicated in Table 22.13. The figures relate only to WAPDA.

TABLE 22.13

*Use of Electricity by Types of Consumers*

Units sold are in millions and  
figures in brackets are percentage

WAPDA ONLY

Consumers	1970-71	1971-72	1972-73	1973-74
	Units sold	Units sold	Units sold	Units sold
1. Domestic	387.930000 (9.78)	392.122378 (9.45)	454.163 (9.88)	520.139 (10.94)
2. Commercial	146.190000 (3.69)	140.604207 (3.39)	159.409 (3.47)	157.080 (3.65)
3. Industrial	1755.030000 (44.25)	2130.609892 (51.37)	2222.137 (48.32)	2254.510 (47.40)
4. Agricultural	1072.270000 (27.04)	983.510163 (23.71)	1169.621 (25.43)	1123.591 (23.62)
5. Public Lighting	21.920000 (0.55)	19.018122 (0.46)	21.933 (0.48)	20.705 (0.44)
6. Bulk Supply	582.440000 (14.69)	481.709651 (11.61)	571.740 (12.43)	662.598 (13.93)
	3965.78	4147.574413	4599.003	4756.623

Source : WAPDA.

The development of generating capacity has to be oriented to maximum hydel capability besides providing for the introduction of coal and to supplement natural gas in additional thermal generation which is required to firm up hydel power. Basically, the thermal stations planned will bridge the gap between maximum and minimum hydel capability and surplus hydel power during the periods of high water flow will be utilized to cut down fuel cost in thermal power stations.

Power planning in Pakistan takes on added relevance when the different power markets are inter-connected by transmission lines. The on-going primary transmission programme is largely confined to the individual power market particularly the Northern zone system to transmit power from the Mangla and Tarbela Hydel power stations to the main load centres. The only exception is the scheme for a 220/132 KV transmission line for inter-connecting the Quetta area with the national grid.

Under Pakistan's Constitution the provinces can opt to take over retail distribution of power. So far Punjab and Sind have opted to take over this responsibility whereas the Provinces of NWFP and Baluchistan have indicated their desire to leave this responsibility with WAPDA. Whether this responsibility is handled by WAPDA or the Provinces, the work involved in marketing the power will remain the same.

It is estimated that about 20,000 miles of 11 KV lines, 10,000 miles of LT lines and 20,000 distribution sub-stations will be constructed during 1975-80 in order to serve 6 lakh new consumers. These facilities will have to be designed not only to provide new service connections

but also to improve the quality of service to existing consumers. Eleven KV capacitors will be required for improving the power factor and voltage condition and these should be provided wherever necessary on the 11 KV lines.

The Government of Pakistan has rightly placed great emphasis on raising the quality of life among the rural population through an extensive rural electrification programme. This is an area in which the Provinces, which are taking over distribution, will have to play an effective role. The programme during 1975—80 envisages electrification of at least 1,000 villages per year with the following Province-wise break-down.

Punjab	..	..	..	..	..	600
Sind	..	..	..	..	..	300
Baluchistan	..	..	..	..	..	30
NWFP	..	..	..	..	..	70

A plan for expansion of installed capacity of electricity must take into account a number of factors and complexities. The expansion in capacity must be adequate to meet the growing demand for energy at different locations. In determining the size of installed capacity, adjustments have to be made for seasonal variations in output of hydro-electric projects, which necessitate provision of thermal units to provide a balanced supply throughout the year. Firm capability is also reduced by the extent to which spinning reserves (to meet emergency demands) and maintenance reserves (to meet scheduled maintenance) are provided. Provision of spinning reserve is costly but if these reserves are eliminated the reliability the system is adversely affected.

Another major element in determining capacity is whether the maximum daily demand or peak load should be reduced through various devices. Normally, a power system attempts to provide for meeting the maximum demand, as determined by the requirements of the consumers. For a developing country, however, the question arises whether the additional expenditure on a larger installed capacity is justified to cater to the natural peak load when the peak load could be reduced, at considerable savings in investment costs. Reduction can be brought about through change in working hours and other measures which, though inconvenient, can nevertheless be adopted, without loss of output and efficiency.

In planning installed capacity and its location, the integration of the power system through inter-market transmission links has also to be taken into account. Any serious delay in a transmission link can lead to unwanted surpluses or deficits in a regional system.

The generation programme must also aim at reduction in the use of thermal energy. First priority must be given to the use of hydro-electricity and providing for thermal generation only where it is unavoidably necessary. Lastly, an effort has to be made to minimise costs. In many cases, the cost and time factor are in conflict and a decision has to be taken on the basis of relative merits. The cost per unit of various sources of power is indicated in Table 22.14.

TABLE 22.14

*Average Unit Costs for various Sources of Power*

**GENERATION**

**Hydro-Electric Plants (i) Power**

**Rs. per K.W.**

Mangla 7 & 8	1,270
Warsak 5 & 6	1,328
Tarbela 5 to 8	2,071
Gas Turbines	2,270
Gas-fired steam stations	2,431
coal-fired Stations	2,916
nuclear Plant	7,240

## TRANSMISSION

500 KV

220 KV

Rupees per Mile

5,19,8000

850,000

## DISTRIBUTION

For 600,000 new consumers

Rupees per new consumer

4,170

*Source: Planning Commission.*

Many of the factors mentioned earlier are reflected in the extent of utilization of installed capacity or the load factor. The WAPDA system has been operating at a load factor of 65 percent and above. On the other hand, the KESC have experienced load factors of around 60 percent. A high load factor is obviously more economical in terms of investment costs but, as the experience of WAPDA shows, a high load factor results from load-shedding, unreliability of supplies and other inconvenience. A lower load factor of around 60 percent, as in the KESC system, reflects a reliable supply system for conditions obtaining in the country. In planning generation programmes, a choice has to be made, therefore, between higher cost, lower load factor and reliable supplies and a high load factor with less investment but inconvenience and restrictions in supply of power.

A strong case can be made out for improving the operational efficiency of the entire system of generation, transmission and distribution of electricity. This has technical, economic and administrative aspects which are in turn co-related. The abnormal losses in the system and the poor quality of service to the consumer need to be taken extremely seriously.

The elasticity of growth between per capita GDP and per capita generation of electricity during 1960—65 was 3.85 and was estimated at 2.07 during the Third Plan period. During the period 1970—75 the elasticity was greatly distorted due to short-term adverse influences including the conflict with India and delinking of East Pakistan. During 1975—80 greater emphasis has been placed on energy intensive industry. Accordingly for projecting the per capita generation of electrical energy it has been assumed that for every 1 percent increase in per capita income the demand for energy will grow at an average of 1.5 percent. For 1975—80 the growth of per capita income is projected at 6 percent compounded annually. The demand for energy, therefore, is expected to grow by 9 percent per annum. The projections based on these macro variables which have been checked with market surveys of WAPDA indicate the year-wise projection of energy generation as in Table 22.15.

TABLE 22.15  
*Projection of Energy Generation*

Year									KWH	Population	KWH
									Growth rate 9 percent	(in millions)	Growth rate 12 percent
1974-75	..	..	..	..	..	..	..	..	154.64	69.21	10702.634
1975-76	..	..	..	..	..	..	..	..	168.56	71.29	12001.47
1976-77	..	..	..	..	..	..	..	..	183.73	73.43	13491.29
1977-78	..	..	..	..	..	..	..	..	200.26	75.63	15145.663
1978-79	..	..	..	..	..	..	..	..	218.28	77.90	17004.012
1979-80	..	..	..	..	..	..	..	..	237.93	80.23	19089.123
1980-81	..	..	..	..	..	..	..	..	259.35	82.60	21422.31
1981-82	..	..	..	..	..	..	..	..	282.68	85.00	24027.8
1982-83	..	..	..	..	..	..	..	..	308.13	87.46	26949.049
1983-84	..	..	..	..	..	..	..	..	335.86	89.96	30213.965
1984-85	..	..	..	..	..	..	..	..	369.09	92.50	34140.825

*Source : Planning Commission.*

## Review of Industrial Development in Pakistan

The development of industry in Pakistan is a success story which combined enthusiasm, fervour and patriotism in the private sector with dedication and a sense of purpose in the public sector. Between 1969-70 and 1974-75 Pakistan industry has, however, been plagued by stagnation on account of labour unrest and indiscipline, loss of confidence in the private sector and recession in the industrialised countries. In 1975 conditions appear to be brightening and the next decade may well be a repetition of the success story of the 50's and 60's provided the confidence of the private sector is restored and governmental policies do not again move to extremes.

The development of industrial production is indicated in Table 22.16. Pakistan's progress in the field of industrial development was very impressive till the sixties. While at the time of independence Pakistan had very little industry, within 15 years, the contribution of manufacturing industry to GNP increased to about 11%. The rate of growth of large-scale industry in that period was about 15% per annum. The industrial sector of the economy provided more employment opportunities, accelerated import substitution and growth in exports, and provided much needed diversification to the Pakistan economy. The course of history is influenced by personalities, and this is also true of economic development in general and the growth of industry in particular. The author was privileged to work closely with the founder Chairman of the PIDC, Ghulam Faruque, and the Industries Secretary in the fifties, Abbas Khaleeli. Both were giants in their field and their mantle in the sixties was successfully carried by Industries Secretary Syed Saeed Jafri. All three fell from grace at one time or another; the loss was to the public sector for in the private sector they have fared much better.

TABLE 22.16

### *Development of Industrial Production*

	UNIT (1959-60:100)	1950-51	1954-55	1959-60	1964-65	1969-70	1972-73	1973-74	1974-75
1. Index of industrial production		23.7	61	100	210.6	398.4	459.7	487.6	483.6
2. Cotton cloth	000 yards	70,000	389,000	544,000	715,000	725,000	704,000	708,234	673,394
3. Cotton Yarn	000 lbs.	36,000	252,000	354,000	454,000	602,000	829,000	836,566	803,193
4. Paper	Tons	---	---	7,800	15,700	25,200	---	20,321	19,930
5. Paper Board	Tons	---	---	4,500	5,600	14,000	19,800	41,350	42,014
6. Art Silk Yarn	000 lbs.	---	---	---	---	---	---	12,437	11,636
7. Art silk and rayon cloth	000 yds.	---	N.A.	141,700	321,000	786,000	583,000	950,000	674,000
8. Woollen Yarn	000 lbs.	---	---	---	---	---	---	10,922	12,758
9. Electric bulbs and tubes									
a) Bulbs	000 Nos.	N.A.	N.A.	N.A.	9,143	11,025	N.A.	11,574	15,031
b) Tubes	000 Ft.	N.A.	N.A.	N.A.	269	821	N.A.	2,141	1,987
10. Cycle Tyres and Tubes									
a) Tyres	000 Nos. }	620	2,000	3,080	6,890	6,730	5,830	3,252	2,974
b) Tubes	000 Nos. }	---	---	---	---	---	---	3,862	4,158
11. Motor Tyres & tubes									
a) Tyres	No.	---	---	---	59,000	109,000	168,000	236,336	242,672
b) Tubes	No.	---	---	---	67,000	115,000	162,000	174,781	209,300
12. Vegetable Ghee	Tons	6,000	13,000	28,000	90,000	124,000	184,000	229,067	268,116
13. Sugar	Tons	22,000	48,000	83,000	156,000	600,000	426,000	615,500	495,450
14. Cigarettes	Million Nos.	2720	4430	8,170	14,300	22,370	27,620	27,885	26,804
15. Safety Matches	000 Gross Boxes	330	423	514	1,770	1,220	2,350	2,590	3,238
16. Fertilizer									
a) Nitrogenous	Nutrient Tons	---	---	42,200	78,900	260,500	582,000	299,976	320,591
b) Phosphate	do--	---	---	80	800	2,250	4,500	4,157	6,312
17. Soda Ash	Tons	---	28,500	26,600	33,800	66,700	73,100	79,970	70,523
18. Caustic Soda	Tons	---	---	4,400	8,700	28,000	34,800	37,456	36,456
19. Cement	do--	47,000	63,000	97,000	163,000	261,000	3,10,000	3,110,819	3,312,265
20. Sheet and plate glass	000 sq. ft.	---	N.A.	N.A.	N.A.	N.A.	N.A.	19,158	13,763

In the economy of undivided India the area that is now Pakistan produced a large share of the agricultural produce on which the major industries of the sub-continent were based. It was primarily a supplier of food and raw materials. In the first year of the country's industrial development, private investors, presented with a variety of promising opportunities, selected those which assured the highest profits with the least organisation effort and minimum investment. Although this was a wise investment policy from the stand-point of the individuals concerned, it did not lead to a balanced industrial development from the stand-point of the country.

Several industries in which the country had considerable natural advantage remained largely undeveloped for lack of private enterprise.

### PIDC ESTABLISHED

For the purpose of promoting those industries of national importance for which private enterprise was not forthcoming, the Pakistan Industrial Development Corporation was established in January 1952. By the beginning of the First Plan period the P.I.D.C. had undertaken some 30 schemes involving a total expenditure of about Rs. 560 million, of which the Government's share was about Rs. 380 million, and the private share Rs. 10 million. The P.I.D.C.'s major investments have been in paper and paper board, cement, fertilisers, jute mills, shipyards, and the Sui-Karachi gas pipeline. These six industries accounted for 85 percent of the total capital outlay in the projects under execution at the beginning of the Plan period. The aim of the industries programme in the First Plan (1955—60) was to aim at an increased capacity in industries only where the capacity still was too small to process a desirable amount of indigenous raw materials or supply goods which would reduce the use of foreign exchange for imports of manufactured products. The Plan as presented took into account sanctions which were given already and deliveries of machinery and equipment from foreign countries which were ordered already and in some cases paid for. Thus, some of the new capacity asked for in the Plan was not reflected of the new policy of orderly industrial progress, but reflected irreversible decisions taken earlier. The new policy asked a careful selection of new industries and of projects to expand old ones, and a much better utilisation of existing capacities. Judged on the basis of their productive performance the large-scale industries more than fulfilled expectations. It was estimated that the output of these industries should increase by about 80 per cent between 1954 and 1960. In fact by 1958 output had already reached 69% above the 1954 level and the 1960 target was reached in 1959. Progress in a number of industries, especially cotton textiles has been notable since October, 1958. A significant aspect of industrial development was the extent of investment. It amounted to 1,100 million rupees in the private sector and 750 million rupees in the public sector. These amounts were very high for the period 1955—60 although they fell short of the targets by 31% in the case of the private sector and 53% in the case of the public sector.

The industrial policy adopted in the Second Plan (1960—65) was not to prescribe a rigid framework but to let the composition and the pattern of industrial development evolve itself in response to the trends in international trade, availability of raw materials, and price movements. Emphasis was laid on a better utilization of the installed capacity by balancing, modernization and expansion of the existing industries, and by setting up new ones. Adequate provision of infrastructural facilities and fiscal and monetary incentives was envisaged for the development of backward and less developed regions of the country to ensure a balanced growth of industries. Preference was given to industries which were expected to use indigenous raw materials, earn or save greater foreign exchange, make larger contributions to the national income per unit of investment, or speed up further production of comparatively more essential goods. The primary aim of the industrial policy was to increase industrial production for domestic consumption and export through provision of liberal facilities, through increased private investment (both local and foreign) and, where necessary, through public investment. Great reliance was placed on private enterprise in recognition of the fact that the private sector plays a key role in the economic development of a country.

During this period, several measures were adopted to accelerate the growth of industries. The import policy was liberalised gradually to meet the growing needs of industries; larger allocations were provided for the import of machinery, spares and raw materials. A tax holiday, ranging from four to eight years, was granted for new industries. Price and distribution controls were relaxed. Incentives were provided in the form of the 'export bonus scheme' and the 'export credit guarantee scheme' to stimulate production and export. Facilities for profit and capital remittance were provided to create a favourable climate for foreign private investment. Avoidance of double taxation agreements and investment treaties were concluded with a number of countries.

To accelerate the growth of industries, liberal credit facilities, both in local and foreign currencies, were provided through the Industrial Development Bank of Pakistan (IDBP), the Pakistan Industrial Credit and Investment Corporation (PICIC) and other credit institutions. A National Investment Trust (NIT) was set up to channel small savings into industrial investment. A number of technical institutes were established to supply skilled manpower. Tariff protection was granted to selected industries.

While private enterprise was encouraged to play a vital role in the industrial development of the country, the Government-financed sector, both public and semi-public, took up those projects which were capital intensive and technologically complex, or those for which adequate private capital was not forthcoming, or which were to be established as pioneer units. In pursuance of the decentralization policy of the Government, the responsibility for industrialization was transferred from the Central Government to the Provincial Governments concerned. As a result, the Pakistan Industrial Development Corporation (PIDC), which was the principal central implementing agency for industrialization, was bifurcated in 1962 and the East and West Pakistan Industrial Development Corporations took over their respective functions in the two provinces.

In conformity with the Government policy of dispersal of industrial units throughout the country and the provision of basic facilities such as land, water and power for promoting balanced development of industries, large industrial estates were developed at selected places in both Provinces.

As a result of measures taken by the Government for industrial development, the manufacturing sector (both public and private) attained a remarkably rapid growth and diversification. Industrial capacity expanded rapidly and there was a substantial increase in industrial output. The country attained self-sufficiency in a large number of consumer goods as well as capital goods and the Plan target of 60 per cent increase in industrial production was not only achieved but exceeded. During 1964-65, the index (base 1959-60=100) of industrial production went up to 210.6. An encouraging development was that the private enterprise in the country had acquired a measure of experience which qualified it for expanding its operations independently as well as in collaboration with foreign investors.

The industrial sanctions issued to the private sector in the Second Plan period amounted to Rs. 7,547.6 million out of which the amount actually spent between 1960-65 amounted to Rs. 4,624.6 million which was 26.4% higher than the plan allocation of Rs. 3,660 million. The private sector had really given a magnificent response to the opportunities offered it. In the public sector the actual investment was Rs. 1,305 million as against an allocation of Rs. 1,460 million. The public sector had implemented 90% of the plan allocation, a good record.

Another significant development in the Second Plan period was the regularisation of unrecognised units. This was the author's idea and with one stroke of the pen some 400 available production units were rehabilitated. They had committed no legal offence; their sole crime was to establish useful production facilities based on locally available plant and equipment and for this initiative they had been deprived of the facility of directly securing imported raw materials and spare parts.

The strategy of industrialisation for the Third Plan period (1965-70) was based on the lessons learnt from industrial development in the past 15 years. With the achievement of self-sufficiency in the production of essential consumer goods, the emphasis was shifted to the establishment of intermediate and basic capital goods industries with a view to extending the import substitution programme over a much wider front. The long-term objective of eliminating dependence on external assistance also called for this shift of emphasis from lighter industries to heavier industries so that the country became progressively self-sufficient in capital goods required for development. Development and expansion of industries for exports, based on the country's natural and acquired advantages, was an important element in the strategy of industrialisation for the Third Plan. The Plan made an allocation of Rs. 12,770 million for industrial development: Rs. 4,770 million for the public sector and Rs. 8,300 million for the private sector. This



allocation was about 24% per cent of the total Plan outlay of Rs. 52,000 million. The growth target of large-scale industries was planned at 10 per cent per annum.

In 1966, following the Indo-Pakistan war of 1965, various elements and programmes of the Third Plan were carefully revised to cope with the reduced availability of financial resources. The industrial strategy of the Plan was reoriented in favour of a fuller utilization of industrial capacity, coupled with a selective expansion of industries meant to cater to the export market and the agricultural sector. This policy was to be accompanied by an ambitious programme to develop the much needed skills in sophisticated industries and a shift to the private sector of a part of the responsibility assigned earlier to the public sector. In the revised strategy of the Plan, the public sector outlay on industry was revised downward by about 21.4 per cent to Rs. 3,513 million, a part of the reduction being offset by a larger allocation to the private sector. Investment in the private sector, thus, increased from Rs. 8,300 million to Rs. 9,257 million.

The revised strategy of industrial development did not yield the expected results. The growing need for maintaining the balance of payments position necessitated a tight credit policy which resulted in reducing the demand for investment. Consequently, private sector investment showed signs of slackness. The Industrial Investment Schedule could not become fully operative since it was found necessary to impose an *ad hoc* restriction on import-oriented industries. Better utilization of industrial capacity, the most important element in the revised industrial strategy, was not possible as the supply of raw materials remained erratic. The investment climate was also affected by the disturbed conditions that prevailed in the country in the latter half of 1968-69.

The decline in the flow of investment and an unsatisfactory position in respect of supply of raw materials, in turn, affected the growth rate of the industrial sector. Compared to the 15 per cent growth rate achieved earlier, the growth rate declined to 6 per cent in 1965-66. There was, however, some improvement in the growth rate in 1966-67 when it rose to 10.6 per cent mainly because of improved investment activity in that year. However, the level of investment failed to show a continued recovery, the growth rate resulting in a decline to 7.4 per cent in 1967-68. In 1968-69 also the growth rate fell short of the Annual Plan target of 14 per cent. This was mainly due to the reduced availability of commodity assistance as well as the labour disputes and strikes during the latter half of that year. The growth rate of 12 per cent in the large-scale sector of industries was achieved as envisaged for 1969-70. On the whole, the performance of the large-scale industrial sector during the Third Plan period was not as good as that in the Second Plan period.

About 66 per cent of the investment planned in the public sector under the revised Plan allocation was achieved by the end of 1969-70. In the private sector, only 23 per cent of the Industrial Investment Schedule was sanctioned during the first two years of the Plan. The pace of sanctions picked up in 1967-68 due mainly to the bunching of larger sanctions for fertiliser factories. As a result, the total industrial sanctions issued up to June, 1970 for large, medium and small industries amounted to Rs. 6,630 million or 71.6 per cent of the Plan target of Rs. 9,257 million.

During 1970—75 production in large-scale industry increased at an average of 4.4 per cent per annum. Due to the decline in production in 1970—72 and despite the recovery in 1972—75 the average annual growth was substantially lower than in previous Plan periods.

	Annual Growth Rate (Percentage)
Second Plan .. .. .	16.8
Third Plan .. .. .	9.9
1970—75 .. .. .	4.4
(i) 1970—72 .. .. .	(—) 2.8
(ii) 1972—75 .. .. .	9.6



In mid-1975, there are 155 cotton textile mills having an installed capacity of 9,800 looms and 0.42 million spindles. In 1973-74, the production of yarn was 837 million lbs. and of cloth 708 million yards.

Since early 1974, this industry has been faced with recession due to the global slump which has hit this industry hard. The impact of the crisis has been felt more in Pakistan because our textile industry is heavily export-oriented. The severity of the impact of slump can be seen from the fact that the export of yarn from 402 million lbs. in 1972-73 to 166 million lbs. in 1973-74. During the period 1974-75, yarn exports amounted to 167 million lbs. only because of the depending of the slump. The major buyers of cotton textiles (Hongkong, Japan etc.) are resorting to a cut-back in production. Because of the demand constraint the production of cotton yarn declined to 803 million lbs. during 1974-75, as compared with 837 million lbs. in 1973-74. Likewise, during the above period, the production of cloth fell to 673 million yards from 708 million yards in 1973-74.

To overcome the crisis, the Federal Government reduced the export duty on cotton yarn in March 1974, then in June 1974 and finally abolished it in October 1974. Similarly, in the case of cloth, the duty, first reduced in June 1974, was completely removed in August 1974. Along with it, export duty on hosiery and made-up textiles was also abolished. The above measures did not produce the desired effect because the international recession grew worse and the slump in textile exports continued.

Other measures taken subsequently to further ease the situation included instruction to the financial institutions to reduce the margin for advancing credit against raw cotton, cotton yarn and cotton cloth; buying of yarn by the Trading Corporation of Pakistan for export; sending abroad of textile sales missions and entering into barter deals with a number of countries to reduce the accumulated stocks.

The Industrial Investment Schedule for the Fourth Plan period (July 1970—June 1975) envisaged the addition of 725,000 spindles and 9,000 looms. By the end of March 1975, 57 units with a total of 750,000 spindles had been sanctioned under the 'PAYE' Scheme, involving an investment of Rs. 344 million (Rs. 257 million external and Rs. 87 million internal). Besides, a 200-loom unit was sanctioned by PICIC.

In addition, 225,000 spindles have been sanctioned—one unit of 25,000 spindles for Fauji Foundation and two units comprising 100,000 spindles each as a joint venture with Iran to be located in Baluchistan (Uthal and Beleli).

Province-wise break-down of the total capacity sanctioned upto March 1975 was as follows:—

Province	No. of units sanctioned	Spindles	Looms
Sind .. .. .	121	2,482,764	20,780
Punjab .. .. .	111	2,048,968	18,181
N.W.F.P. .. .. .	19	316,712	2,285
Baluchistan .. .. .	2	49,960	—
Total:	253	4,898,404	41,246

Province-wise total installed capacity as on March 31, 1975 was as under:—

Province	Spindles	Looms
Sind .. .. .	1,786,000	13,960
Punjab .. .. .	1,403,000	14,000
N.W.F.P. .. .. .	196,000	1,540
Baluchistan .. .. .	25,000	252
	3,410,000	29,752

It is proposed to increase the installed capacity to 4.2 million spindles in 1979-80 and increase production of yarn to 1400 million pounds. The number of looms is expected to rise to 115,000 as against the present sanctioned strength of 65,000.

**Vegetable Ghee:** The vegetable ghee industry was nationalised on September 2, 1973 as there were widespread complaints of shortage of this essential item. Since nationalization, both production and availability have substantially improved. From 184,000 tons in 1972-73, production rose to 221,000 tons or by 19.7 per cent in 1973-74, and is estimated to have increased by 26.7 per cent in July 1974—March 1975 over the comparable period of 1973-74. The present trend of production is in line with the production target of 275,000 tons set for 1974-75.

The demand for vegetable ghee has been fast rising due to the rapid increase in population, increased urbanisation, the rise in incomes and lack of appreciable growth in animal fats. In June 1974, the price of vanaspati ghee was increased by 25 per cent to Rs. 7.50 per cent per seer due to the sharp rise in the price of imported soyabean oil and tin plates as well as of local cottonseed oil and to Rs. 9.00 per seer from April 7, 1975.

As the demand for vegetable ghee is fast increasing, the Federal Government is setting up 7 units with a total capacity of 54,000 tons—2 units in Baluchistan (15,000 tons), 2 units in NWFP (18,000 tons), 1 unit in Azad Kashmir (6,000 tons), one unit in Northern Areas (6,000 tons) and one unit in Tribal Area (9,000 tons). Plans are also being drawn up for expansion through a rationalisation programme. The main constraint in increasing vegetable ghee production is the availability of edible oil.

**Sugar:** In mid-1975 there were 25 sugar mills, with a cane-crushing capacity of 44,000 tons per day which is equivalent to 589,000 tons of refined sugar per annum. Production of sugar in 1973-74 was 615,500 tons and during 1974-75 it was 495,450 tons. The fall in sugar production is due to an estimated 11.5 per cent decrease in sugar-cane production caused by low water level in the rivers and a pest attack on the crop.

In view of the anticipated shortfall in sugar production during 1974-75, it was decided to reduce the sugar quota at ration depots from April 1975. The sugar price was also revised upwards from Rs. 3.50 per seer to Rs. 4.00 per seer.

High priority is being given to domestic production of sugar to meet local demand. Eight mills having a daily cane/beet crushing capacity of over 18,000 tons are being installed—4 in the Punjab, 3 in Sind and 1 in N.W.F.P. In addition, 5 sugar mills are under consideration in the Punjab and 3 in Sind. The crushing capacity in 1979-80 is proposed to be raised to 80,000 tons per day from the 1975 capacity of 43,500 tons per day.

**Rice Milling:** The present capacity in rice milling is 2.8 million tons. This capacity consists of outputs of machinery ranging from the household to modern mills. The output of rice will increase from 2.65 million tons in 1974-75 to 3.9 million tons by 1979-80. Out of this 1.3 million tons will be exported against the present export of 800,000 tons. For the increase in export, modern mills will have to be installed to ensure better quality of milling. The capacity utilisation will also have to be improved by requiring the mills to work for two shifts for 200 to 250 days. This may require changes in procurement policies. It is envisaged that an investment of Rs. 20 million would be required in the public sector and Rs. 300 million in the private sector for the setting up of 75 mills of 3 tons per hour capacity.

**Paper:** The projected demand for paper in 1979-80 is around 90,000 tons. The present capacity is 54,000 tons although the production has been less than the capacity and was about 23,000 tons in 1973-74. One mill in Baluchistan of 10,000 tons capacity is expected to be installed. Another paper mill of 30,000 tons capacity is proposed to be set up to meet the total demand. This would increase the production capacity in 1979-80 to 94,000 tons. A provision of Rs. 685 million will be made for the purpose. The present production of board is 37,000 tons while the capacity is sufficient to produce 54,000 tons annually. The demand is expected to rise to 70,000 tons in 1979-80. An investment of Rs. 10 million in the public sector is to be made for this expansion.

**Iron and Steel:** The 1.1 million ton integrated steel mill at Pipri, 28 miles from Karachi, on which work has begun, is scheduled to come into partial production in 1978-79. By 1979-80, the country would have sufficient capacity to satisfy in full the demand for certain specified steel

products (plant, steel strips) and to meet to a substantial extent the demand for pig iron, billets, etc. The foundation stone of the 1.1 million tons capacity Karachi Steel Mills was laid on December 30, 1973. The mill is now estimated to cost Rs. 14,000 million (foreign exchange Rs. 7,370 million). It is a Soviet-aided project and the major portion of foreign exchange cost will be met out of the U.S.S.R. credit of which the latter has so far agreed to provide 340 million roubles (Rs. 4511 million). The work on the steel mills is in full swing. Infrastructural facilities such as roads, sewerage and sanitary disposal system, unloading facilities at berths, power stations, etc. are being set up. At present, nearly 800 technical and non-technical personnel are working on the project. A large number of Pakistani technicians are getting training in steel technology in the USSR. Machinery and equipment have already started arriving from the USSR.

The Karachi Steel Mills is expected to start partial production in the year 1978-79, but the full cycle of product-mix during Phase I will be achieved in the early eighties which will be as under:

Items	Tons
Billets .. .. .	260,000
Hot Rolled Sheets .. .. .	445,000
Cold Rolled Sheets .. .. .	90,000
Galvanised Sheets .. .. .	100,000
Formed Sections .. .. .	120,000
Total:	1,015,000
Pig Iron .. .. .	135,000
Coke .. .. .	215,000

Another major project, which is in advanced stage of investigation, is the setting up of a small (approximately 200,000 tons) integrated mill, based on Baluchistan ores, with Chinese assistance. Currently work is in progress on proving the minimum reserves. Apart from these two major projects, investigation will continue on the possibility of the use of Chichali ore in small-sized mills, based on the Krupp Ren process or by direct reduction of ore to produce "Lumpen" for electric furnaces.

The existing capacity for production of steel from scrap is not being fully utilised. No further expansion is envisaged except such foundries and furnaces as may be found necessary for specialised purposes.

Imports of iron and steel products in 1974-75 amounted to about 1200 million rupees. The capacity for steel-making based on ore and scrap, will increase to nearly 1.9 million tons by 1979-80. Full utilisation of the capacity will imply a sharp increase in per capita consumption of steel. The possibility that some surplus steel may have to be exported in the initial years after completion of the Karachi Mill should be kept in view.

**Heavy Mechanical Complex, Taxila:** This factory has been established with Chinese Assistance. It has heavy machining and large fabrication facilities, including supplementary foreign capacity, for the manufacture of industrial plants, machinery and equipment.

The trial production at the factory started in July 1970. The items in the production programme include sugar mills equipment, cement factories equipment, low pressure package type boilers, overhead travelling cranes, road rollers, truck chassis etc.

The factory has already delivered equipment to the Larkana Sugar Mills which had been functioning since March 1975.

**Heavy Foundry and Forge Project, Taxila:** This unit is also a Chinese-aided project which was approved by the Federal Government in April, 1972, at a total cost of Rs. 2,186 million and a foreign exchange component of Rs. 553 million. Due to devaluation and the increase in scope of production, the project is now estimated to cost Rs. 478 million with a foreign ex-

change component of Rs. 202 million. The factory was expected to start trial production by the end of 1975.

The production programme of the factory includes steel castings, steel ingots, iron castings, press forgings, forged balls (grinding media for cement industry) etc.

The turnover at full capacity is expected to be worth Rs. 395.7 million.

**Pakistan Machine Tool Factory, Landhi:** This factory is a highly sophisticated engineering facility created to meet the growing requirements of precision machine tools for the engineering industry and of transmission components and automotive parts to support the progressive manufacturing programme of tractors, jeeps, trucks and cars in the country. The factory was established in collaboration with M/s. Oerlikon of Switzerland who acted as consultants and trained a large number of Pakistani engineers and technicians in Switzerland.

Major items in the production programme include machine tools, gearboxes, and axles for trucks, jeeps and tractors, pressure die castings, rough forgings etc.

Value of products at full capacity would be Rs. 153.3 million per annum.

**Chemical Fertilizers:** There are 6 fertilizer factories in Pakistan, 4 producing nitrogenous and 2 producing phosphatic fertilizers. During 1973-74, the production of nitrogenous fertilizers was 7.3 lakh metric tons (3.0 lakh N/tons) and of phosphatic fertilizers 23,300 metric tons (4,200 N/tons). Factory-wise production is given below:

Name of factory	Product	1973-74 (Nutrient tons)	1974-75
1. Esso Fertilizer	Urea	60,600	
2. Dawood Hercules	Urea	1,58,400	
3. NFC, Daudkhel	Ammonium Sulphate	19,900	
4. NFC, Multan	(i) Ammonium Nitrate	16,200	
	(ii) Urea	14,900	
Total	Nitrogenous fertilizer	3,00,000	320,591
5 and 6. National Fertilizer Corporation Factories, Lyallpur/Jaranwala.	Phosphatic fertilizer	4,200	6,312

Six more fertilizer plants are under installation, while two are in the planning stage.

#### PLANTS UNDER INSTALLATION

Factories under installation	Production	Capacity (Nutrient tons)	Expected year of completion
1. Expansion of NFC factory, Multan	(i) Nitro-phosphate	70,000	Mid-1977
	(ii) Calcium ammonium nitrate	218,000	
	(iii) Urea		
2. Expansion of fertilizer factory, Lyallpur/Jaranwala	Single super-phosphate	10,280	Mid-1975
3. Fauji Foundation's Urea Fertilizer Projects, Sadiqabad	Urea	250,000	October-1978
4. Urea Fertilizer Projects, Kandhkot	Urea	276,000	December-1978
5. Hazara Fertilizer Ltd.	Triple super-phosphate	N.A.	N.A.
6. Pakistan Fertilizer, Karachi	M.A.P. (Blending unit)	N.A.	1977

## PROJECTS IN PLANNING STAGE

Name of Factory	Capacity (Nutrient tons)
1. Urea Fertilizer Project, N.W.F.P.	32,200
2. Urea Fertilizer Project, Mirpur Mathelo (Sind)	2,40,000
Total:	2,72,200

The demand for fertilizers in 1979-80 in terms of nutrients, is expected to be about 750,000 tons of nitrogen, 250,000 tons of phosphates and a small quantity of potash. The fertilizer manufacturing capacity already installed is 310,000 nutrient tons. With the addition of new projects in the planning stage or under execution, production of nitrogenous fertilizers could rise to almost one million nutrient tons, outstripping the domestic demand. Production of phosphatic fertilizer estimated at 178,000 nutrient tons will, however, fall short of requirements. It may become necessary to continue to import phosphatic fertilizer while exporting surplus nitrogen. Acceleration of the programme for phosphatic fertilizer can be considered after reserves of rock phosphate in Hazara District have been fully proved. Potash would continue to be imported during 1975-80. The total investment on fertilizer projects is estimated at Rs. 5,350 million during 1975-80. The fertilizer programme includes two public sector projects, namely Pak-Arab fertilizer factory at Multan and National Fertilizer Corporation Factory at Mirpur Mathelo. In addition a small urea plant and a phosphatic fertilizer plant in the NWFP are being set-up. Provision has also been made for one urea plant in the private sector.

In the case of pesticides, there is presently no capacity for basic manufacture. It is proposed to set up a factory for production of malathion as a joint venture with a foreign manufacturer.

## Objectives of Industrial Policy

Industrial policy in a planned economy is a powerful force in determining the quantum of industrial production, the role of manufactured goods in import substitution and export earnings, and, above all, in the efficiency (or productivity) of production. In order to be really effective, the implementation should be well in line with the stated objectives of industrial policy. Industrial policy is significantly influenced by the politics of the ruling party and industry is one sector of the economy which responds sharply to the changing winds of political decisions and administrative attitudes. The maintenance of law and order, political stability and a helpful official attitude are a *sine qua non* for effective implementation of the objectives of an industrial policy. The years 1958-69 saw a forceful industrial policy and it was in this period that the industrial sector got its maximum official backing.

Under-developed countries should concentrate on intermediate technology, or to use Schumacher's words "something between the sickle and the harvester". This is necessary for labour-intensive economies that are short of capital. In one recent project, the Intermediate Technology Development Group helped Sri Lanka find designs for small, relatively simple sugar-refining machines that would permit that nation to decentralize the sugar industry and put more people to work.

The energy policy should have as its objective the supply of adequate sources of energy at the cheapest possible price from within national frontiers. Self-sufficiency in energy resources should be a major goal of industrial policy even if this implies producing domestic energy at a cost upto 35% higher than imported energy. The mix of energy supply should be judiciously selected in the light of local availability, problems of generation and distribution, fixed cost per unit, and recurring cost per unit. Constraints should not be placed on the private sector if it can deliver the goods; this is especially true of foreign investment in oil exploration and exploitation. Mineral production in general also needs to be stepped up to provide a more

solid base for industrial growth and exports. In the latter part of 1975, the government has announced a reasonable oil and gas policy package consisting of:

- (i) Attainment of self-sufficiency in oil in as short a time as possible;
- (ii) Augmentation of the refining capacity in the country to dispense with the need to import refined products required by the growing economy;
- (iii) Development of the Sui and Marri gas fields and extension of the gas network;
- (iv) Speedy development of the dormant gas fields;
- (v) Enhanced targets for supply of gas to an ever-increasing number of our people;
- (vi) Fuller and maximum utilization of our resources of LPG;
- (vii) Efficient utilization of oil and gas resources and reduction of waste; and
- (viii) Removal of bottlenecks in the supply of petroleum products even to the remotest corners of the country.

The policy package for the development of small industry reflects clear thinking on the subject; whether or not it will be implemented is another matter. The objectives of policy for the development of small industry comprise:

- (a) In view of the increased importance of small-scale industries, these industries should be treated, for purposes of planning and policy making, as an integral part of the industrial sub-sector concerned and not as a relatively unimportant adjunct.
- (b) The absence of current statistics on production and capacity is a big drawback. This deficiency needs to be overcome very urgently.
- (c) Fiscal and commercial policies affecting industries must be adjusted to meet the special requirements of medium and small industries. Within the sector, special arrangements may have to be devised for the very small units. Particularly, attention should be given to the needs of small units in respect of credit arrangements and in the formulation of import policies.
- (d) For very small units, it would be desirable to try a comprehensive approach whereby the units are given a package of services consisting of supply of inputs, designs, credit facilities and marketing of the output, etc.
- (e) Large-scale industrial units, particularly those in the public sector, should make the maximum possible use of sub-contracting.
- (f) The policy of providing common facilities needs to be continued but with such changes in these services as might be found necessary in the light of actual experience.

One cannot also quarrel with the priorities with regard to industrial development which basically consist of:

- (i) Agro-based industries, namely, industries using agricultural raw materials and industries supplying inputs to agriculture.
- (ii) Industries producing essential wages goods.
- (iii) Basic and heavy industries (such as the steel mill).
- (iv) Export-oriented industries.
- (v) Import substitution industries.

In the case of the public sector industries, it is very necessary to insist on efficiency which is reflected in productivity and achievement of targets of production. Any overrun on cost estimates should be taken seriously and the pace of implementation should be carefully watched. The public sector should be more self-financing and should not depend solely on public doles. There should be an inter-industry flow of funds within the public sector to make the best use of available resources. The overlapping of jurisdictions between the federal and provincial governments should be avoided. The plethora of public sector corporations needs to be reduced drastically in order to provide economy and efficiency. Besides, it is essential that the public sector corporations be extended the autonomy that prevails in their private sector counterparts; without this autonomy they just cannot be expected to function with any acceptable degree of efficiency.



Government should encourage the dispersal of industry to less developed areas but certainly not at the cost of frightening away prospective investors or seriously damaging the economy of the project. After all the entire country is under-developed and the existence of external economies is a valid and critical factor in influencing the decision regarding the location of industry. However nobody can quarrel with government's policy of encouraging the flow of industrial investment in less developed areas through fiscal concessions (such as extended tax holidays, accelerated depreciation allowances, and favourable rates of import duty on capital goods and lower excise duties on finished products), availability of better credit facilities, and a measure of preference in governmental purchases. If industrial estates with all their facilities can be established in less developed areas and the people living there welcome entrepreneurs from outside the area, then industry should voluntarily be attracted to these areas in view of the fiscal and credit concessions available there.

Lastly, industrial policy should assist the private sector, encourage it and give it all the confidence which it so badly needs. Foreign investment should be made to feel wanted and welcome. The demarcation between the private and the public sectors should not be rigid. As a matter of fact, the country stands to gain if these two sectors are allowed to compete on an equal basis; it will, though, have to be ensured that in such a situation, government does not extend step-motherly treatment to the private sector. The threat of nationalisation and labour indiscipline should not hang like the Sword of Damocles over the heads of existing and potential entrepreneurs. As explained earlier, government's policy on nationalisation and employer-employee relations should be stable, clear-cut and rational. Every new election campaign should not rest on the doubtful emotional appeal of transferring the ownership of the means of industrial production to the workers and the students. "Nothing venture, nothing gained" is true in its application to the industrial sector, but the composition of risks involved in industrial investment should not be unnecessarily burdened with political and social uncertainties.



# Transport & Communications

## NATURE AND IMPORTANCE

A reliable, effective and relatively inexpensive system of transport and communications is absolutely essential for efficient production, distribution and administration; for promoting national integration and a freer flow of ideas, capital and goods and services over international frontiers. Transport and communications are a basic element of a country's economic and social infrastructure. The transport and communications sector involves very heavy capital investments; the benefits are also spread over a large number of years, typically 20 years or so for most such projects.

The transport and communications sector covers railways, roads, road transport, ports, shipping, civil aviation, postal services, telecommunications, and the two electronic mass media of radio and television.

The more important benefits accruing from the development of the transport and communications sector include reduced operating expenses to the users and owners of these facilities; stimulation of economic development; savings in time for passengers and freight; fewer accidents and reduced damage; increased comfort and convenience; widespread dissemination of ideas and information; military and administrative efficiency; and cultural and political cohesion.

The most direct benefit from a new or improved transport facility, and frequently also the most important one and the one most readily measurable in monetary terms, is the reduction of transport costs. While this benefit accrued initially to the users or the owners of the facility, competition or the desire to maximize profits leads them to share it in various degrees with other groups, such as producers, shippers and consumers. The cost reduction, therefore, benefits the nation as a whole and not merely the users of the facility.

The transport and communications system has a profound effect on economic development. Marketing is an essential pre-requisite for almost any form of large-scale production. Agricultural production gets a big boost with the construction of feeder roads which provide an effective means of transporting and marketing agricultural production. The transport and communications system helps the conversion of an agricultural economy into a market economy. Industrial production would not be possible without arrangements for the transport of raw materials, transport of finished goods to domestic and foreign markets, mobility of labour, and exchange of information with regard to the present and future trends in national and international market conditions. The effects of improvements in transport on the stimulation of economic development should be analysed with care and each project must be investigated individually to find out whether economic development could have taken place even without this improvement, whether the resources used in the new development would otherwise have been used less productively and whether the economic activity stimulated does not replace an activity which would have otherwise taken place. Where a transport facility leads to increased output, the net value of this additional output is the proper measure of the economic benefit which has accrued.

Improvements in transport save time, and time can be money. Whether time is money depends on how the time saved is actually used. It would have an economic significance if it is utilised for more production or voluntary leisure. But if, as in developing countries, it is idled away then the saving in time merely aggravates the existing under-employment situation. The time saved on the movement of freight within the country and internationally is an important fact. Expeditious deliveries reduce the pressure on transport capital as well as inventory capital; delays on the other hand prevent the effective utilisation of expensive equipment.

Reduction in accidents is extremely important for countries like Pakistan where the number of accidents is about 5 to 8 times higher than in countries with similar agricultural, topographic